Province of
Newfoundland

Department of Health

Annual Report 1980-1981

GOVERNMENT OF NEWFOUNDLAND AND LABRADOR

ANNUAL REPORT
OF THE
DEPARTMENT OF HEALTH
FOR THE
FISCAL YEAR APRIL 1, 1980 - MARCH 31, 1981

Published by the Authority of
The Honourable H. W. House
Minister of Health

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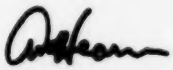
To the Honourable
H.W. House
Minister of Health
Province of Newfoundland
and Labrador

Sir:

I have the honour to present to you, the Annual Report of the Department of Health for the fiscal year April 1, 1980 to March 31, 1981.

Respectfully submitted,



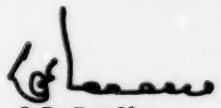
Ambrose M. Hearn
Deputy Minister

To Ambrose M. Hearn
Deputy Minister
Department of Health
Province of Newfoundland
and Labrador

Sir:

I have the honor to present, for your review, the Annual Report of the Department of Health for the fiscal year April 1, 1980 to March 31, 1981.

Yours very truly,



D.E. Howell
Assistant Deputy Minister

MINISTER'S FORWARD

In the last year we have continued in our efforts to improve the quality of health care delivered to the people of Newfoundland. There are a number of distinct observations I can make on this point and they must be taken in light of the increasing financial constraints which we face.

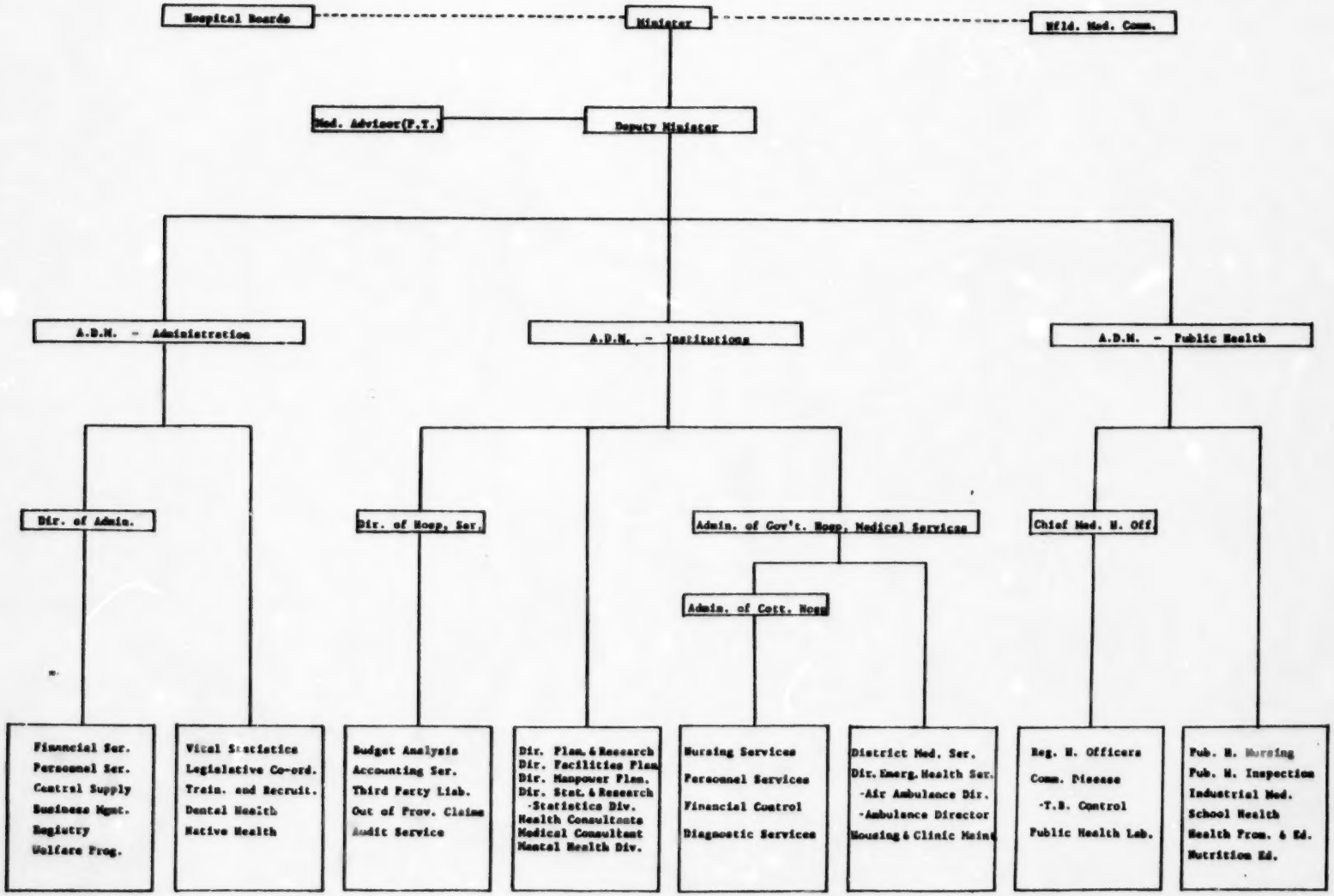
The Department has begun a program to regionalize public health services. The Western office was the first to be implemented with plans for the remaining regions in the next budget cycle. There were continued efforts to improve the delivery of health care at the rural level. Refurbishment, construction or planning took place in clinics, community health centres and hospitals at Petite Forte, Sops Arm. Flowers Cove, Makkovik, Postville, Rigolet, Forteau and Channel. Coupled with this was the continued interest which the smaller hospitals had in gaining accreditation and concomittant efforts to rationalize administration by formally incorporating smaller cottage hospitals under appropriate regional hospitals.

As you review our 1980-81 Annual Report you will note that we had an increase in activities. These activities are demonstrative of continued fine efforts by all in or related to the health care sector. These are efforts, in the face of financial constraints, to create alternative approaches to the delivery of care without diminishing its quality. These are efforts for which I give my appreciation and thanks.

H.W. House
Minister

HIGHLIGHTS

* 156,724 prescriptions were filled under the Senior Citizen's Drug Plan
* Psychiatric Day Care, Audiology, Speech Pathology and Ultrasound programs, Central Newfoundland Hospital
* Diabetic Day Care at James Paton Memorial Hospital
* Children's Mental Health Program at Western
* Prosthetics - Orthotics program at Children's Rehabilitation
* Neonatal Intensive Care Unit at Janeway Completed
* Planning the designs for Channel & Forteau CHC
* Clinics at Petite Forte, Sops Arm
* Medical Clinics completed at Flowers Cove, Makkovik, Postville and Rigolet
* Intensive Care Unit at James Paton Memorial Hospital
* Financial support to Canadian Mental Health Association to operate Social Home in St. John's
* Regionalization of Public Health Services to the Western Region
* Approximately 95,000 adult patients treated in hospital
* Approximately 9,600 births and 3,000 deaths
* 68,500 children treated under the Dental Program
* 49,000 public health inspections for food control, housing, sanitation and water supply and others
* 85,000 in attendance for Health disseminated films



DEPARTMENT OF HEALTH
FUNCTIONAL ORGANIZATION CHART

Reports

1. ADMINISTRATION

The primary function carried out by Administration is the preparation and management of the Department of Health's budget. This budget is comprised of allocations which support the staffing and equipment of each Division and directed allocations which are administered by these Divisions but apply to the public sector. Administration carries out other centralized administrative functions such as Accounting, Purchasing, Personnel, even though some of these functions may involve direction from other Government Departments. Finally, it assumes responsibility for carrying out a number of specific and socially oriented programs. Some of the more important responsibilities of Administration are discussed below.

Central Supply's main purpose is to distribute drugs and other supplies to target groups in the population and to institutions on request. These drugs and supplies are distributed with the intent of reducing the cost burden to the individual or reducing the price to the institution through bulk purchasing. In all cases, the individuals require certification from Health, Justice or Social Services and the drugs must be ordered through a physician or institution. Central Supply orders, stores and distributes drugs and/or supplies for: Immunization Program, Drug Indigent Program, Provincial Food Bank (26 patients in 1980) and Cystic Fibrosis Program (64 patients in 1980). The prescriptions, sent to Central Supply for filling, are prepared for indigents who do not go drugstores. In 1980-81 Central Supply issued $3,200,000 worth of supplies.

The Business Management Division provides drugs to long term care patients and maintains the Department's inventory of office and equipment supplies and also acquires non-capital supplies for the Divisions. In addition, there is an oxygen equipment procurement program which is carried by this Management Division.

The Accounts Division maintains the on going detailed processing of Accounts Payable, Revenue Allocations, Cost Distribution, Inventory Control and Shared Cost Program Claims. From those accounts, detailed financial and statistical data for management information are provided.

Under the Senior Citizens Drug Plan, $895,600 was paid out on 156,724 prescriptions for an average cost of $5.71. This Plan provides benefits to 34,000 senior citizens who meet the following requirements: over 65 years of age, registered with Old Age Security, Division of Health and Welfare Canada, and in receipt of the guaranteed income supplement.

To its responsibilities, in 1979-80, the Department of Health added the operation of Hoyles Home and the provision of financial assistance to Government supported patients at the Conception-Trinity Inter-Faith Home (Carbonear) and the Western Memorial Special Care Unit (Corner Brook).

Table 1.0

Newfoundland Department of Health Operating Costs, 1978-1981.

	1978-79		1979-80		1980-81	
	Amt. in $ millions	%	Amt. in $ millions	%	Amt. in $ millions	%
General Hospitals	156.8	69.2	175.6	69.3	203.1	69.1
Medical Services	35.9	15.8	32.7	12.9	39.7	13.5
Mental Health	9.0	4.0	10.4	4.1	13.2	4.5
General Services	13.7	6.0	15.2	5.9	16.4	5.6
Public Health	9.1	4.0	9.9	3.9	10.7	3.6
Other	2.0	1.0	4.8	1.9	2.4	.8
Home for the Aged			2.5	1.0	4.0	1.4
Homes for Special Care			2.2	0.9	4.5	1.5
TOTAL	226.5	100%	253.3	99.9%	294.0	100.1%

NOTES:

1. Medical Services: Grants of Medical Care Commission, Salaries of District Medical Officers; Mental Health: Waterford Hospital and Mental Health Services Divison; General Services: Drugs, Appliances for Indigent persons, Grants to Non-Government Agencies, Grants to Medical Students; Home for Aged: Hoyles Home; Homes for Special Care: Conception - Trinity Inter-Faith Home, Carbonear and the Western Memorial Special Care Unit, Corner Brook.
2. A different accounting method for fee for service and salaried physicians was initiated. In 1978-79 the salaried physicians are double counted in General Hospitals and Medical Services. In 1979-80 salaried physicians are counted once in general hospitals.
3. Portions of Mental Health (Waterford Hospital) costs have not been stated because they are being paid for by the Department of Public Works and Services. General hospital expenditures on mental health are not included in the Mental Health category.
4. 1980-81 figures are taken from budget.

The operating costs for the Department of Health for the fiscal years 1978-1980 are described in Table 1.0. While the dollars increase or decrease for each item, their percentage of the total health dollar remain constant. Medical services demonstrate a decline. This, however, does not represent a decrease in physician service. Instead, it represents a change in accounting designed to eliminate double counting. The percentage increase for the total budget between 1979 and 1980 was 12.2%. Between 1980 and 1981 it was 13.8%. Very little in dollars for new programs is reflected in the table when one considers inflation running at 12% or higher.

2. VITAL STATISTICS

The Division is responsible for the administration of the Vital Statistics Act, the Marriage Act, and the Act respecting legitimation of children born out of wedlock. It assists the Department of Justice in the administration of the Change of Name and Adoption Acts by providing advice on how to proceed with requests related to these Acts. The Division has three distinct functions. First, it maintains a register of all births, marriages, and deaths in the province, and provides the public with appropriate certification. Second, the Division is part of a larger national information system with data from each birth, death, and marriage being collated at Ottawa and returned to the province in tabulated form. Third, various levels of departments and numerous researchers utilize this data for planning and evaluation.

Fourteen people are employed within the Division which is located in St. John's. For the fiscal years ending in 1979 and 1980, the issuance of certificates decreased from 42,201 to 28,600. This decrease was accompanied by a price increase for certificates in November 1979 ($3.00 to $5.00). As table 2.1 shows, the Live-birth Rate based upon hospital morbidity indicates a continuing decline, dropping from 18.1 per 1,000 in 1977 to 17.3 in 1979 (per 1,000 population). During the same 3 year period, the Crude Death Rate remained at 5.5 per 1,000 people. Excluding migration factors, the Natural Increase declined from 7,203 in 1978 to 6,445 in 1979. Marriages declined between these years, from 3,840 to 3,731. The June intercensal population estimates for 1978 and 1979 were 569,000 and 574,000.

The leading causes of death in 1979 are presented in Table 2.0. Acute Myocardial Infarction (587), Ischemic Heart Disease and other Chronic Heart Disease (300), Heart Failure (56), Cardiac Dysrhythmias (37), Acute Pulmonary Heart Disease (19), and Ill-Defined Heart Disease (16), accounted for 1,015 (32.4%) of all deaths. Occlusion of Cerebral Arteries (53), Atherosclerosis (52), Acute Aneurysm (24), Intracerebral Haemorrhage (22), Subarachoid Haemorrhage (18), and Other Cerebrovascular disease (16), accounted for 185 (5.9%) deaths, Malignant Neoplasms of the Trachea, Bronchus and Lung (132), Stomach (93), Colon (75), Unspecified (56), Pancreas (40), Female Breast (39), Rectum (31), Prostate (28), Brain (20), Esophagus (20), Kidney and Other Urinary Organs (NOS) (19), Ovary and other Uterine Adnexia (17), Cervix Uteri (15), and Bladder (14), accounted for 649 (20.7%) of the deaths. In total, these three major groupings accounted for 1800 (58.9%) of the deaths.

Among males the leading causes of death were: Acute Myocardial Infarction (373), Ischemic Heart Disease and other Chronic Forms (176), Malignant Neoplasms of Trachea, Bronchus, and Lung, Stomach and Colon Chronic Obstruction, Airway N.E.C. (45). These accounted for 809 deaths (43.1%). Among females the leading causes of death were Acute Myocardial Infarction (214) Ischemic Heart Disease and other Chronic Forms (124), Malignant Neoplasm of the Stomach (23), Diabetes Mellitus (43), and Malignant Neoplasm of the Breast (39), these accounted for 443 deaths (35.2%). No maternal deaths were reported for the year.

Table 2.1

Population Statistics, Newfoundland, 1977-1979

	1977	1978	1979
Population (thousands)	559.7	561.6	563.0
Births: *	10,693.0	10,318.0	9,926.0
Rate per 1,000 pop.	19.1	18.4	16.1
Illegitmate births	1,439.0	1,340.0	1,484.0
% of births	13.5	13.0	15.5
Marriages	3,895.0	3,841.0	3,731.0
Deaths:	3,138.0	3,115.0	3,136.0
Rate per 1,000 pop.	5.6	5.6	5.6

* Approximation based on mothers delivered (per hospital morbidity file) minus stillbirths (hospital morbidity file). Population figures revised therefore rates revised.

By age group in 1979, the 0-14 year age group accounted for 182 deaths, the 15-64 group recorded 917 deaths, and the 65+ group reported 2,037 deaths. The percentage breakdown for these groups in 1977, 1978, and 1979, are: 5.7%, 32.7%, 61.6%; 6.5%, 30.6%, 62.9%; and 5.8%, 29.2%, 65%.

The Annual Report for Vital Statistics is available by request from Vital Statistics Division, Department of Health, Basement Floor, Confederation Building.

Table 2.2

Newfoundland Infant Mortality 1977-79.

	1977		1978		1979	
	No.	Rate	No.	Rate	No.	Rate
Stillbirths	77	7.2	80	7.8	69*	7.0
Neonatal	70	6.5	94	9.1	67	6.7
Post Neonatal	37	3.5	34	3.3	42	4.2
Infant	107	10.0	128	12.4	109	11.0
Perinatal Rate	147	13.7	173	16.7	102	10.2

Rate is per 1000 live births except perinatal which is for 1000 total births, live and still. * Taken from hospital morbidity file.

3. HOSPITAL SERVICES DIVISION

The Hospital Services Division is responsible for the administration and funding of the Federal-Provincial Hospital Insurance Program in the Province. This program provides in-patient and out-patient hospital services to every resident of Newfoundland and Labrador, both within the Province and in recognized hospitals outside. Also funded through the Division are hospital-based home care and ambulatory care programs, as well as medical, public health, dental and ambulance services in a number of areas of the Province. Within this provision of service, the Division has a monitoring role in the efficacious use of the programs, standards and equipment. The consulting services subdivision plays an important part in this regard.

Cost to the Province for various health care services as depicted in Table 3.0 amounted to $224,450,000 in 1980-81 and $208,141,000 in 1979-80. Board-operated hospitals accounted for $202,639,000 in 1980-81 and $189,066,000 in 1979-80. The corresponding figures for Provincially operated hospitals were $16,513,000 and $14,333,307. Table 3.1 depicts the gross operating costs by hospitals in the Province which are applicable to the various health care services. Gross operating costs of the Hospital Insurance Program were $200,904,000 (88.2%) in 1980-81 and $175,363,000 (86.9%) in 1979-80. The cost of the provincial psychiatric hospital (Waterford Hospital) was $15,745,000 (6.9%) in 1980-81 and $14,735,000 (7.1%) in 1979-80. The total number of patient days for all hospitals was 962,193 in 1980-81 and 954,425 in 1979-80. Of that number, general hospitals had 819,688, in 1980-81 and 812,928 in 1979-80. The corresponding figures for the Waterford Hospital were 142,405 and 141,497. Costs per patient day for the general hospitals were $245.00 in 1980-81 and $199.62 in 1979-80. For the Waterford Hospital they were $114.80 in 1980-81 and $81.17 in 1979-80.

Costs for hospitalization outside the Province were $3,625,000 in 1980-81, and in 1979-80 they were $3,066,000. The number of cases treated was 8,528 in 1980-81 and 6,600 in 1979-80. It is interesting to note that while this represents a 29% increase in the number of case treated, the proportion of in-patients actually decreased again as it did in 1979-80. This, presumably, is further evidence of the increased availability to carry out complicated treatment within the Province. Evidence of this is also seen in the fact that, while the total number of cases treated increased by 29%, the increase in total costs, including inflationary increases as well as those resulting from higher volume, was only 18%. The average cost per case decreased to $425 from $467 in 1979-80.

Hospitalization statistics for the non-provincially operated hospitals (excluding psychiatric hospitals) are depicted in Table 3.2. There were 2,893 beds with 97.1% of these accredited. Occupancy for the hospitals was 72.1% with an average length of stay of 9.3 days. It should be noted that the in-patient utilization of many of the very small hospitals is poor. This is because in-patient facilities must be maintained whilst the facility is expected to transfer patients as quickly as possible to larger regional referral centres. The total operating cost was $191,997,142 and the cost per day was $255.12 (excluding mental hospital costs). These figures represent gross costs and include medical salaries and portions of home care and ambulance costs. These figures also include out-patient costs of approximately $18,102,864. While not exact, reconciled patient day costs between Tables 3.0 and 3.2 can be demonstrated. Note

Table 3.1

Gross Operating Cost of Hospitals in Province (Nfld.) Applicable to the Various Health Care Services For The Fiscal Years Ended March 31, 1979, 1980 and 1981

	1978-1979			1979-1980			1980-1981		
	Total	Salary	Sal.%	Total	Salary	Sal.%	Total	Salary	Sal. %
Hospital Insurance	$151,862,903	$104,835,800	69.0%	$175,362,762	$114,006,592	65.0%	$200,904,215	$136,313,649	67.9%
Medical Services	5,719,330	5,192,034	90.8%	7,386,878	6,635,011	89.8%	6,099.928	5,591,227	91.7%
Ambulance Services	682,790	545,679	79.9%	846,841	690,188	81.5%	928,418	769,143	82.8%
Home Care	641,576	306,616	47.8%	830,426	408,924	49.2%	840,675	416,011	49.5%
Waterford Hospital	11,667,414	8,031,275	68.8%	14,235,034	10,323,303	72.5%	15,744,547	11,951,044	75.9%
Other	3,290,532	2,378,844	72.3%	3,188,568	2,148,764	67.4%	3,207,819	2,115,504	65.9%
TOTAL	$173,864,545	$121,290,248	69.8%	$201,850,509	$134,212,782	66.5%	$227,725,602	$157,156,578	69.0%

1. These costs do not include depreciation. Costs for Government operated hospitals were estimated for 1979, 1980 and 1981.

2. Hospital Insurance costs would also include incidental costs such as provincial pension, Department of Public Works expenditues, Public Service Commission payments.

3. Costs include: Prosthetic Services, Grenfell Region District Nurses, Public Health, and Dental Health.

also that there are no government operated hospitals represented in Table 3.2.

Since Hospital Insurance Plan does not relieve from hospital costs, those who are legally responsible for injury to others, the Hospital Services Division follows up on cases of hospitalization resulting from accidents when possible third party liability is indicated. In 1980-81 a total of 259 accounts receivable were set up, and recoveries totalling $383,800 were achieved. The Division also handles third party liabilities for the Newfoundland Medical Care Commission, in respect of the Medicare Program, and the total recovered on this account during the year was $35,300.

A number of new programs and services were approved by the Division:

1. Psychiatric Day Care, Audiology, Speech Pathology, Ultrasound at the Central Newfoundland Hospital.
2. Diabetic Day Care at the James Paton Memorial Hospital.
3. Children's Mental Health Program at the Western Memorial Regional Hospital.
4. Prosthetics-Orthotics Program at the Children's Rehabilitation Centre.
5. Work Skills Evaluation Program at the Leonard A. Miller Centre.

In 1980-81, the Hospital Services Consultants completed:

1. Role study and functional program for proposed hospital at Channel.
2. Functional program for renovations at Sir Thomas Roddick Hospital.
3. Project in conjunction with Newfoundland and Labrador Computer Services on computerized hospital information system.
4. Seminar for hospital financial personnel on the new reporting system.
5. Review for accreditation of a cottage hospital at Old Perlican.
6. Course for updating Food Service Supervisors.
7. Review by Nursing Consultants of nursing homes for Department of Social Services.

4. HEALTH FACILITY PLANNING

The major function of this Division involves the planning of buildings and facilities for construction, modification or renovation. This involves: working with owners and/or users, the Department of Public Works and Services, architects, consultants, project managers, and planning teams to ensure that the best possible facilities are constructed within the constraints of money available, and that the facilities constructed are operationally suitable, efficient and conform to approved standards. Within these activities is the development and implementation of functional plans and architect's briefs, and the monitoring and approval of progress throughout the planning and building stages. Each year as part of these functions the Division establishes a major capital expenditure account for hospitals.

During the 1980-81 fiscal year, $5.6 million was expended. Approximately $2.5 million of that amount was spent on upgrading of mechanical, electrical, heating, laundry, fire and life safety, medical gas systems, etc., at St. Lawrence, Botwood, Burin, Grand Bank, St. Clare's, Grace General, Buchans, Central Newfoundland Hospital, Grand Falls, James Paton Memorial Hospital, Gander, and Waterford Hospital. The Medical Clinics at Flower's Cove, Makkovik, Postville, and Rigolet were completed requiring an expenditure of $560,000 in 1980-81. Financial assistance was awarded to community groups to complete small clinics at Petite Forte and Sop's Arm. The Hospital Expansion Program at the Western Memorial Hospital was completed requiring a final expenditure of $900,000 in 1980-81. The Leonard A. Miller Centre continued to be renovated and refurnished requiring funding of $880,000 so that chronic, geriatric, convalescent, rehabilitative care and the Public Health Laboratories could be accommodated. The Neonatal Intensive Care Unit at the Janeway Child Health Centre was completed and upgrading of the Post Operative Recovery Room commenced. Design Planning commenced on a new hospital facility for Channel and a new Community Health Centre for Forteau. Construction on both of the foregoing projects is expected to start in mid 1981.

5. HEALTH MANPOWER PLANNING DIVISION

The Health Manpower Planning Division was established during 1978. The function of this division is to determine the manpower resources needed to meet the health care needs of the Province and to strike a balance between the supply and demand of health manpower. These tasks are achieved through identification of the current supply and demand of health professionals and the projection of future supply and demand. From these future levels, methods are then developed which will assist in meeting thes needs.

During the 1980-81 period there were a number of health manpower surveys developed. Most of this information was put on computer where it was processed and stored for future reference.

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7. Review by Nursing Consultants of nursing homes for Department of Social Services.

4. HEALTH FACILITY PLANNING

The major function of this Division involves the planning of buildings and facilities for construction, modification or renovation. This involves: working with owners and/or users, the Department of Public Works and Services, architects, consultants, project managers, and planning teams to ensure that the best possible facilities are constructed within the constraints of money available, and that the facilities constructed are operationally suitable, efficient and conform to approved standards. Within these activities is the development and implementation of functional plans and architect's briefs, and the monitoring and approval of progress throughout the planning and building stages. Each year as part of these functions the Division establishes a major capital expenditure account for hospitals.

During the 1980-81 fiscal year, $5.6 million was expended. Approximately $2.5 million of that amount was spent on upgrading of mechanical, electrical, heating, laundry, fire and life safety, medical gas systems, etc., at St. Lawrence, Botwood, Burin, Grand Bank, St. Clare's, Grace General, Buchans, Central Newfoundland Hospital, Grand Falls, James Paton Memorial Hospital, Gander, and Waterford Hospital. The Medical Clinics at Flower's Cove, Makkovik, Postville, and Rigolet were completed requiring an expenditure of $560,000 in 1980-81. Financial assistance was awarded to community groups to complete small clinics at Petite Forte and Sop's Arm. The Hospital Expansion Program at the Western Memorial Hospital was completed requiring a final expenditure of $900,000 in 1980-81. The Leonard A. Miller Centre continued to be renovated and refurnished requiring funding of $880,000 so that chronic, geriatric, convalescent, rehabilitative care and the Public Health Laboratories could be accommodated. The Neonatal Intensive Care Unit at the Janeway Child Health Centre was completed and upgrading of the Post Operative Recovery Room commenced. Design Planning commenced on a new hospital facility for Channel and a new Community Health Centre for Fortesu. Construction on both of the foregoing projects is expected to start in mid 1981.

5. HEALTH MANPOWER PLANNING DIVISION

The Health Manpower Planning Division was established during 1978. The function of this division is to determine the manpower resources needed to meet the health care needs of the Province and to strike a balance between the supply and demand of health manpower. These tasks are achieved through identification of the current supply and demand of health professionals and the projection of future supply and demand. From these future levels, methods are then developed which will assist in meeting these needs.

During the 1980-81 period there were a number of health manpower surveys developed. Most of this information was put on computer where it was processed and stored for future reference.

The first survey of major employers of health and social service personnel was completed. It produced data on 22 health manpower groups, e. g. Nurses, Nursing Assistants, etc., with a total of 62 employers (including all hospitals and nursing homes) being included. The main highlights from this report are outlined below:

As of the spring of 1980, there were 5594.2 approved full-time equivalent positions for health and social service personnel in the employing agencies surveyed; of these positions 95.8% were filled, 4.7% were vacant, and 2.5% were blocked.

In the employing agencies surveyed, 83.8% of their established positions were for nursing personnel (Registered Nurses, Nursing Assistant I, and Nursing Assistant II).

The highest overall vacancy rates were found in the following classifications: Ultrasound Technician - 33.3% of a total of 13 approved positions. Physiotherapist - 25.3% of a total of 73.8 approved positions. Occupational Therapists - 21.8% of a total of 39 approved positions Psychologist - 20.7% of a total of 29 approved positions. Respiratory Technologist - 20.0% of a total of 15 approved positions.

A total of 611.2 new positions in all categories were projected as being needed by 1982. These figures would bring the total needed positions for all categories to 6,205.4 by 1982 and indicate a 10.9% increase over 1980 approved positions.

Four hospitals and two nursing homes predicted that they would have a critical shortage of nurses during the 1980 summer months. Critical shortage were also predicted in the following fields of practice in physiotherapy (2 institutions), occupational therapy (1 institution) and speech therapy (1 institution).

The initial phase of the development of a Health Manpower Data Base was completed during the latter part of 1980 and early 1981. A report on the nursing profession was the first step in this project with other professions to be added once a uniform system, which will suit the demands and differences of all groups, is produced.

For the nursing study, all the Registerd Nurse Renewal Forms were placed on computer. These forms provided information regarding the registration status, marital status, type of position, field of practice, place of employment and location of practice of the registrants.

The study showed that there were a total of 4625 nurses registered with the Association of Registered Nurses of Newfoundland in 1980. Two hundred and sixty-eight of these (51 with active and 217 with inactive licenses) indicated that they were outside the province and hence were not included in the body of the report.

The main statistics of the report were:

Of the remaining 4357 registrants, 3992 (91.6%) have active licenses and 365 (8.4%) have inactive licenses.

44.7% of those who are actively registered, are under 30 years of age and 61.5% are under 35 years of age.

2.1% of the nursing population are in the 60 and over age group and will be required to retire within the next five years.

91% of all registrants are employed in nursing, either on a full-time, part-time or casual basis. Less than 1% are employed in areas other than nursing.

1.6% of all registrants are not currently employed in nursing but are seeking employment in the profession.

Of the 3,967 registrants who are employed in nursing 72.6% are employed as staff nurses, 3.8% are employed in teaching positions, and 12.7% are employed in management positions.

51.1% of the staff nurses are under 30 years of age with 70.9% being under 35. 54.7% of the nurses at the Director and Associate/Assistant Director level are in the 40-54 age group range.

32% of all active registrants are single and 63% were married.

84.7% of all single registrants are employed in nursing on a full-time basis, while 57.3% of all married registrants are employed (in nursing) on a full-time basis. Only 1.9% of single nurses were working as part-time nurses in 1980, while 17.4% of the married nurses worked part-time.

93% of all active registrants have an R.N. diploma, 6.1% have a B.N., and 0.1% have an M.N. as their basic nursing education. 66.5% have no post-basic nursing education.

90.5% of all those employed in nursing have an R.N. as their highest level of education, while only 8.7% have any

further training. Of this 8.7%, 8.2% have a Bachelor's Degree and 0.5% have a Master's Degree.

At the Director/Associate Director/Assistant Director of Nursing level, onl 55.8% have post-basic nursing education and only 4.2% have a Master's Degree in Nursing.

79.2% of all the registrants employed in nursing are working in hospitals, 7.7% are working in nursing homes/ homes for the aged and 5.9% are employed in community health.

63.7% of all registrants live in the eastern health region, 13.8% in the central, 14.2% in the western and 7.7% in the northern region of the province.

The follow-up study of Nursing Assistants graduates of the previous three years was nearing completion at the writing of this report.

Please note in reviewing these statistics, that in certain classifications the number and percentage of positions filled, vacant and blocked may exceed 100%. The reason for this is that some institutions had filled more positions than they had approved.

6. STATISTICS DIVISION

The Division collects, compiles and analyzes morbidity data generated in each of the hospitals in the Province. Although the data is used primarily by the Department for planning and evaluation, the Division also gives assistance to requestors in the field. In other words, the Division attempts to provide information to any interested person demonstrating a need for health related information. As with Statistics Divisions in other Provinces, time is devoted to the preparation of tables for Ottawa's inter-provincial comparisions of morbidity and the Annual Return of Hospitals.

The coding of the morbidity is achieved in two parts. All cottage hospitals, out of province hospitals and other hospitals, not having medical records personnel submit the admission/separation record to the Division for coding. All other hospitals code the morbidity data on a computer readable form.

Between 1980 and 1981 the Division experienced a continued growth in the use of its data files. The primary reason for this increase was an improvement in the timeliness of the data. In January 1979 the 1976 calendar file for morbidity was produced. The 1980-81 fiscal file was expected to be produced prior to March 31, 1982. This increase in timeliness continues to reflect on the diligent efforts of the hospitals and staff of the Division.

Efforts were directed at improving the quality and range of data. The Division initiated a morbidity system review aimed at its methods of data input, processing and reports. Similarly, it entered into discussions with the Provincial Perinatal Committee to develop a computerized system of reporting which would identify high risk babies for programs and follow-up and provide fertility data. During the year mortality surveillance continued as a service for the Medical Service Division. In its simplest form this system is expected to be linked to the morbidity system development. The Division also continued to collect psychiatric data for the Mental Health Division. Two additional areas of concentration during the year were: the development of a health resource inventory by community in Newfoundland and the development of population information.

Table 6.0 shows the age specific population for 1980 and 1981. Projections for selected years beyond 1981 are presented in Table 6.1. A number of trends continue to be evident: declining fertility, birth and death rates, a declining pediatric base, an increasing labor force, and an increasing aged population. All things being equal, if the present rates and distribution of deliveries relative to age of mother continue, the number of deliveries among 35-44 year old mothers wil increase from 5.3% to 10.2% between 1981 and 2001. This implies a substantial increase to the number of high risk pregnancies and related services. The aged population, will increase from 7.4% to 9.4% of the total population. While this group is small it has a dramatic impact upon hospitals; that is, they accounted for 16.9% of separations and 28.0% of the days stay in 1980-81.

In board and government-operated hospitals there were 3653 short and long-term staffed beds which are further broken down by hospital and type of service in Table 6.2. 1981 and 1980 rates per 1000 population were 6.4 and 6.3, respectively. The 1981 short-term and long-term rates were 5.4 and 1.1. As reported by Hospital Services, a higher percentage of these beds were accredited in 1981 than in 1980. The percent accredited was 97.1%. In addition, more of the smaller hospitals sought accreditation.

In 1979, of the percentages of patients hospitalized by age groups, 20.5% were 0-14, 62.7% were 15-64 and 16.9% were over 65. Average length of stay for these three groups were 6.4, 9.5, and 16.8. A more detailed analysis is presented in

Table 6.4. Total patients treated including newborns and residents of Newfoundland treated out of province, was 104,329. In 1980-81, 47.7% of these came from the Eastern Region, 23.7% from Central, 15.7% from Western, 11.5% from the Northern region and 1.4% were out of province.

By place of treatment (i.e. organized by hospital), Eastern had 51.6%, Central had 21.6%, Western had 15.1%, and Northern had 10.8% (See Table 6.3).

The leading causes of hospitalization continue to be Uncomplicated Deliveries and Symptoms, Senility and Ill-Defined Conditions. It is worth noting that although Symptoms, Senility and Ill-Defined Conditions had a very high ranking, there was a decline of approximately 1500 diagnoses between 1978-79 and 1980-81. In other words there has been a concomitant increase to more specific diagnoses.

Amongst males in 1980-81 the leading diagnostic categories excluding symptoms were Other Ischemic Heart Disease (1191 separations); Other Forms of Heart Disease (1022); Other Diseases of the Respiratory System (764); Acute Myocardial Infarction (763); and Calculus of the Urinary Tract (703). Additional causes of hospitalization are found in Table 6.5.

Amongst females in 1980-81 the leading diagnostic categories excluding Symptoms were: Deliveries Without Mention of Complication (5591 separations); Deliveries With Other Complications (2485); Special Conditions and Examinations Without Sickness (1910); Deliveries Complicated by Abnormality of Pelvis (1326); Other Complications of Pregnancy (1309); Disorders of Menstruation (1211); and Diseases of Ovary, Fallopian Tube and Parametruim (1197). Additional causes are found in Table 6.5.

Table 6.4

Separations, Days Stay and Length of Stay by Diagnostic and Age Groups
April 1, 1980 to March 31, 1981, Newfoundland

	Separations	Days	Length of Stay
General Medical and Surgical			
0-14	18,797	117,761	6.3
15-64	41,290	356,345	8.6
65 +	14,988	235,359	15.7
Total	75,075	709,465	9.5
Psychiatry			
0-14	218	3,854	17.7
15-64	3,574	119,470	33.4
65 +	723	28,426	39.3
Total	4,515	151,750	33.6
Obstetrics			
10-14	42	244	5.8
15-24	7,066	41,769	5.9
25-34	5,825	34,656	5.9
35-44	583	4,682	8.0
45-54	14	59	4.2
Total	13,530	81,410	6.0
Total All Diagnoses			
0-14	19,099	121,859	6.4
15-64	58,394	557,225	9.5
65 +	15,711	263,785	16.8
Total	93,162	942,625	10.1

7. GOVERNMENT HOSPITAL & MEDICAL SERVICES

The primary objective of the Government Hospital and Medical Services Division is to provide primary hospital and medical care to the rural areas of the province.

In 1980-81 there were 12 Cottage Hospitals, the Dr. Walter Templeman Hospital and 14 District Medical Clinics directly administered by the Division (a complete listing with locations is found in following paragraphs). The size of hospitals ranges from 16 beds at Markland to 52 at Botwood. The total number of staff is 737. This figure includes 71 salaried physicians - 46 in Hospitals and 25 in District Clinics. The population served by the Cottage Hospital system is approximately 125,000 people.

The Division is centrally administered by a staff of 14 located at St. John's. Headquarters personnel provide overall administration, budgeting, recruitment and personnel, accounting, and purchasing

services. Each hospital is locally managed by a Senior Medical Officer, Charge Nurse and an Administrative Clerk who work closely with headquarters staff.

In 1980-81 operating costs for Government Hospitals and Medical Clinics was $17,391,000 compared to $15,657,000 for 1979-80. (Note: These figures do not include other government department expenditures.) Further details of operating costs are reported in the Annual Statement of Public Accounts.

The hospital utilization data reported in Table 7.0 indicate a decreased usage both on an inpatient and outpatient basis. There was a decline from 204,227 OPD visits (1975-76) to 165,159 visits (1980-81) and a decline in inpatient admissions from 12,022 to 9,671 for this same period. Three very noticeable changes in the government hospitals relate to these declines: the increased number of referrals to larger referral areas and an increase in the number of extended care or long stay patients. This latter observation contributes to a continuing length of stay in excess of 5 days even though admissions are decreasing. The increase in long stays is attributable to an undersupply of facilities and accommodations to deal with these types of patients. Finally, there are proportionately more older people in many of the communities served by the cottage hospitals.

Government operated hospitals are located in the following areas: Bonavista, Bonne Bay, Botwood, Bureo, Burin, Come By Chance, Grand Bank, Harbour Breton, Markland, Old Perlican, Placentia, St. Lawrence and Bell Island.

District Medical Clinics are located in: Harbour Breton, Hampden, Hermitage, Jacksons Arm, King's Cove, La Scie, Marystown, Mose Ambrose, St. Joseph's, St. Mary's, Trepassey, Trinity, Winterton and Woody Point.

Harbour Breton Cottage Hospital was successful in attaining full accreditation from the Canadian Council on Hospital Accreditation. Obtaining this status was the result of much hard work and dedication by all the Harbour Breton Hospital staff and we congratulate them on a job well done.

A program for upgrading and improving laboratory and x-ray services was initiated during the year. Provincial consultants visited every hospital to review and evaluate procedures, quality controls, and equipment. As a result, a quality control program was established and major pieces of equipment were purchased. A training and upgrading course for laboratory technicians in blood banking was begun in cooperation with the College of Trades and Technology. In x-ray, a quality control program was introduced and an ongoing program of inspections by a Radiation Inspection Officer was initiated to improve safety standards and quality of service.

The turnover of medical staff remained fairly high during 1980-81, however, this year we received many more applications and enquiries from Memorial Medical School graduates. We are optimistic that most of our vacancies for permanent positions next year wil be filled locally. During 1980-81, 16 physicians were obtained to fill permanent positions and 32 locum physicians were recruited to fill temporary vacancies for annual and study leave purposes. The majority of these were recruited from England and Ireland.

In Nursing Services there were 27 graduate nurses appointed. The recruitment of nurses for most hospitals did not create any problems, except in the more isolated areas of Burgeo, Harbour Breton, and Bonne Bay where shortages were encountered. We wish to express our thanks to the staff of these hospitals whose hard work and dedication helped to overcome most of the problems.

During 1980, in an effort to meet accreditation standards and to improve the quality of care, formal Nursing Audits were begun.

In co-operation with the Department of Public Works and Services a fire prevention and life safety program was implemented to bring the hospital buildings up to the standards of the current building codes.

Table 7.0

Selected Statistics, Cottage Hospitals, Newfoundland
1975-1981

	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
No. Hospitals	12	12	12	12	12	12
OPD Visits	204,227	193,624	185,185	179,877	181,451	165,159*
Admissions	12,022	11,362	11,259	10,816	12,414	9,671
Patient Days	62,150	61,847	57,788	59,080	53,846	50,104
Avg. Length of Stay (Days)	5.3	5.5	5.1	5.5	4.3	5.3

* estimated OPD visits

8. AIR AMBULANCE PROGRAMME

The Air Ambulance Programme provides two basic services: emergency transport of patients, blood, incubators and other essential items; and the transport of physicians to isolated areas for the holding of clinics.

The Programme divides the province into three areas: Northern Newfoundland and Southern Labrador serviced from St. Anthony; Eastern Labrador serviced from Northwest River; and the remainder of the Province serviced from St. John's.

For 1979-80 and 1980-81 respectively, 6,123 and 5,235 persons utilized the Air Ambulance Service. The average aircraft mileage per flight for those years was 419.2 and 358.0 respectively, (Table 8.0).

Table 8.0

Newfoundland Air Ambulance Programme, 1978-1981

	1978-79	1979-80	1980-81
Patient, Escorts, Physicians Served	4,780	6,123	5,235
Flights	890	1,019	1,134
Miles	393,433	427,119	405,960
Cost of the Programme ($)	659,000	767,420	1,279,150
Miles per Flight	442.1	419.2	358.00
Cost per Transported Person ($)	137.87	125.33	244.35

9. ROAD AMBULANCE PROGRAMME

The Provincial Road Ambulance Programme provides to rural residents of the province access to treatment centres by subsidizing community ambulance operators. The Programme serves a rural population of approximately 350,000 and excludes geographical areas serviced by hospital-based ambulances.

Sixty-two operators are registered. Between 1979 and 1980 the number of patients utilizing the service had increased from 11,556 to 12,096. There are also increases in the mileage subsidy (10%) and in the mileage covered. Further program statistics are given in Table 9.0

Table 9.0

Newfoundland Road Ambulance Programme, 1977-1981

	1977-78	1978-79	1979-80	1980-81
Miles Travelled	1,356,713	1,550,789	1,545,589	1,890,117
Patients Conveyed	9,610	10,427	11,556	12,096
Patient Cost Per Mile ($)	.59	.60	.75	.79
Total Cost Per Patient ($)	83.29	89.14	99.81	123.17
Average Mileage Per Patient	141.2	148.7	133.7	156.3
Total Costs ($)	800,461	929,046	1,153,364	1,489,813

10. DENTAL HEALTH DIVISION

The Dental Health Division has three primary functions: to administer the children's dental program; to increase the level of dental services in underserviced areas; and to conduct educational and preventive dental programs.

The Children's Dental Program provides dental treatment to children up to their 13th birthday. Also covered are various groups of handicapped or disadvantaged children. With the expansion of the Children's Dental Program on April 1, 1978, the age limit of the children had been increased from their 11th to their 13th birthday. A $2.00 charge was also added for each filling or extraction performed.

Most of the treatment services in the program are provided by dentists in private practice. The participation rate has increased to 60% for all children of eligible age in 1979-80, from 43% in 1974-75. Concomitantly, there was an increase in the number of dentists in the province. Average program cost per child/user was $70.80 in 1980-81. Detailed statistics are provided in Table 10.0.

The Division's educational and preventive programs are carried out by dental hygienists located in seven Newfoundland communities. Although additional hygienists are needed, recruitment has been difficult because there has been a national shortage of these trained personnel and because

there had been manpower competition from the private sector. Classroom presentations to school children, prenatal classes, teacher workshops and media appearances are the educational activities of all hygienists. An increasing number of school boards have adopted policies to improve the nutritional content of snacks and lunches available in their cafeterias.

Although substantial subsidies are offered to communities wishing to fluoridate their water systems, Newfoundland continues to have the lowest proportion of fluoridated water supplies in Canada. This situation remains despite evidence that fluoridation can reduce dental treatment needs.

The Division also endeavours to place dentists in underserviced areas by offering bursaries to dental students and offering financial assistance to dentists establishing a practice in remote areas of the Province. Since the program's inception in 1975, 31 of the 126 practising dentists in the Province have been assisted by this program.

Table 10.0

Service Rendered Under Children's Dental Program, Nfld., 1974-1981.

	74-75	75-76	76-77	77-78	78-79	79-80	80-81
Fees for Service ($ in millions)	1.0	1.8	2.2	2.6	3.6	3.9	4.9
Children Treated (in thousands)	39.0	40.8	48.2	60.7	66.8	67.7	68.5
Participation Rate (in %)	43	45	54	N/A*	59	60	61
Average Cost per child/user ($)	28.22	44.10	45.42	42.86	54.41	56.89*	70.8
Extract per 100 restorations	60.0	N/A	56.6	44.3	43.0	40.6	42.0
Per Child Treated:							
Fillings	1.47	1.61	1.44	1.53	1.43	1.41	1.31
Extractions	0.88	.74	.81	.68	.62	.57	.55
Prophylaxis	.57	.67	.72	.74	1.17	1.30	.91
Fluoride treatments	.50	.58	.62	.66	1.12	1.24	.87
X-Rays	.17	.19	.17	.29	.55	.49	.39
Misc.*	.02	.01	.02	.02	.03	.03	.05

* NOTES:
1. Age limit change in 1978.
2. N.S. $58.61; Que. $59.23; P.E.I. $60.00; Sask $71.00; data for 1979-80.
3. Cost data related to fiscal reporting year. All other data related to the school year. All of the 1980-81 column is reported on the fiscal year.
4. Misc. = Treatments include crowns, root canals, dentures, etc.

11. MENTAL HEALTH SERVICES DIVISION

The Mental Health Services Division has a consultative role in the development and continued operation of mental health services in Newfoundland. Its first concern is with the psychiatric aspects of health care; however, it is involved with the whole scope of mental health services. Consultants in psychiatry, psychiatric nursing, social work and psychology, provide advice and assistance to government and to community agencies.

The major activities of the Division include needs assessment, and program planning and evaluation. In 1973, an overall review of and plan for mental health services was prepared, and in 1977 another report set out the same plan with updated recommendations. The Division is also involved in professional education at Memorial University, and continuing education of health services staff. The Division represents the province at various regional and national meetings concerned with mental health services and is a source of information about all aspects of mental health services.

The overall aim of the Division is to develop mental health services that are integrated with other health services, that are accessible, and that promote normal independent living. Towards this aim, psychiatric services have been established at general hospitals in most regions of the province. Now, the majority of people receiving treatment for mental disorders do so as outpatients with minimal disruption of family and work commitments. With continued developments on a regional basis, not only will these basic psychiatric services become more accessible throughout the province, they will also expand to better meet the needs of special groups, such as people chronically and severely disabled by mental disorder (for whom the main source of care is now the Waterford psychiatric Hospital in St. John's).

Psychiatric services are provided by hospitals and psychiatrists in private practice, and they are usually accessed through medical referral. Hospital psychiatric services are multidisciplinary, including

psychiatry, psychiatric nursing, psychology, social work and occupational therapy.

In St. John's, the General, S.A. Grace General, and the St. Clare's Mercy Hospitals have psychiatric services for adults and adolescents over sixteen years. The Janeway Child Health Centre has a provincial psychiatric service for children. The Waterford Hospital, the only psychiatric hospital, serves the whole province for long-term psychiatric care and forensic inpatient services. It provides tertiary psychiatric care for the minority of patients who require more restricted and/or extended care than the existing general hospital psychiatric services can provide.

In other regions of the province, the hospitals at Carbonear, Gander, Grand Falls, Corner Brook, St. Anthony and Goose Bay have psychiatric services, however there is no inpatient service at Carbonear General Hospital pending the appointment of a psychiatrist. Western Memorial Hospital at Corner Brook also has an outpatient psychiatric service for children and adolescents.

As well as inpatient and outpatient care, most psychiatric services provide day treatment in which patients continue to live at home but come to the service in the daytime.

The following highlights were recorded during the year:

Dr. Clarence Pottle retired as Director of the Division and Dr. Howard Strong was appointed to succeed him.

The Waterford Hospital celebrated one hundred and twenty-five years of service.

The Canadian Mental Health Association was given funding by the Department of Health towards the Social Centre for psychiatric patients in St. John's, which had been officially opened earlier in the year.

The Central Newfoundland Regional Health Centre opened a centre for psychiatric day treatment in Grand Falls.

The Minister of Health opened the Child and Adolescent Mental Health Service at Western Memorial Hospital.

An advisory committee to the Minister of Health was set up to review the province's Mental Health Act.

Through the joint efforts of senior officials of the Departments of Health and Social Services, a committee was set up to coordinate the development of community support services. Subsequently several district councils were established around the province, with representation from health and social services and the community.

In 1980 new statistical reports for psychiatric outpatient and day treatment services were introduced with the objective of obtaining valid and reliable data on the utilization of these services. Nine of the ten hospitals providing psychiatric outpatient services submitted complete reports, and these showed a total of 3,522 individuals had used these services during the year. These individuals made 14,200 visits, which yields an average of four visits per patient. 53.5% of the patients were female and 46.5% were male, and 75.3% of them were in the 18-64 age group. 30.5% of the patients had not used psychiatric services before, whereas 69.5% were returning for further treatment or continuing contact from the previous year. Table 11.0 shows an analysis of the patient population by age, sex, and novelty of use. Relative to the population, the 18-64 year group has the highest utilization overall, (8.3 per 1,000) but the 13-17 year group has the highest frequency for initial use of outpatient psychiatric services (2.6 per 1,000).

The eight hospitals in the province providing psychiatric day treatment submitted reports, and these showed that a total of 597 individuals had used these services during the year. The patients made 12,081 visits which yields an average of 20.2 visits per patient. Of the patients entering day treatment during the year, 42.6% came upon discharge from the psychiatric inpatient service, with the remaining 57.4% coming from other sources. 91.7% of the patients were in the 18-64 year group, 3.8% were over 65 years, 3.2% were in the 13-17 year group, and 1.3% were under 12 years. Of the patients completing day treatment during the year, 87% had attended for less than 3 months, and only 0.5% had attended for more than one year. 56.8% had attended for less than one month.

Psychiatric admissions are shown in Table 11.1. The total number of admissions has increased this year, as a result of an increase in the number of admissions to the Waterford Hospital.

Psychology Services: At the Waterford Hospital, the Children's Rehabilitation Centre, and five general hospitals in the province, Psychological Services are organized separately from psychiatry. The Dr. Janeway Child Health Centre and two other general hospitals have psychological services administered by psychiatry. Departments of psychology in general hospitals provide assessment, treatment, and consultative services to inpatients and outpatients of all medical services.

At Western Memorial Hospital and the Central Newfoundland Regional Health Centre, psychology accepts referrals from general practitioners and the latter also provides outreach clinics to some communities in the central region.

As of March 31, 1980, the ten hospitals with psychological services had a total of 31 positions of which 28 were for psychologists and 3 for psychological assistants. Twenty-six positions were filled at year end, and in terms of full months filled the occupancy for the thirty maintained positions was 83.3%. The majority of psychologists have training to the master's level with only three (11.5%) having training to the doctoral level.

Table 11.0

Composition of the Psychiatric Outpatient Population, 1980

Age (year)	Initial Contact		Further Contact	
	Male	Female	Male	Female
0-12	164 (4.66)	60 (1.70)	71 (2.02)	36 (1.02)
13-17	79 (2.24)	85 (2.40)	57 (1.62)	64 (1.82)
18-64	268 (7.61)	362 (10.28)	901 (25.59)	1120 (31.81)
65 +	26 (0.74)	26 (0.74)	71 (2.02)	131 (3.72)

Percentage in parenthesis

Table 11.1

Admissions to Psychiatric Services, Newfoundland 1978-1981

	1978-79	1979-80	1980-81
Waterford	774	816	999
Janeway	98	103	109
General Hospitals*	2180(8)	2256(9)	2223(8)**
TOTALS	3,052	3,175	3331

* Number of hospitals operating psychiatric inpatient services are in parenthesis.
** Excludes Melville Hospital admissions because psychiatric service is not a distinct unit.

12. MEDICAL SERVICES DIVISION

The purpose of the Medical Services Division is to control, monitor or reduce the incidence of communicable diseases. This purpose is administered through a variety of programs: the investigation of disease outbreaks; the distribution and administration of vaccines and immunizing agents; V.D. Control; and a Medical Service which provides advice and treatment. A more detailed review of programs is included within this report in the program appendix.

While the Division was centralized in St. John's during 1978-80, a regional public health services office was opened in Corner Brook in 1981. This office was headed by one of the Division's chief medical health officers. The overall purpose of the regional director was to integrate plans for a public health service for the West Coast.

In late January 1980, an epidemic of measles was reported among teenagers of Beachside, Green Bay. An investigation of the outbreak provided an opportunity to evaluate the effectiveness of measles vaccine. Also, during this month, the diagnosis of a case of malaria in a Vietnamese refugee living in Port aux Basques pointed out the need for physicians and public health workers to be alert to the occurrence of this particular tropical disease.

During February and March, influenza outbreaks were reported from all parts of the province and were associated with increased absenteeism from work and school. Influenza type B virus was identified as the causative agent.

In May, a case of vaccinia in a female, aged 21 years, was diagnosed at the Health Science Centre, St. John's. Investigation revealed that this person had acquired the infection as a result of contact with a member of the Armed Services who had recently received a primary smallpox vaccination in Halifax, NS. Smallpox vaccine has not been distributed in Nfld. since the announcement of the world-wide eradication of smallpox.

In June, a meeting together with officials from the Departments of Municipal Affairs and Environment was held with the Town Council of Baie Verte to discuss means of reducing the high asbestos fibre count in the municipal water supply. Asbestos used

in building materials in schools and public buildings as a possible health hazard also became a matter of public concern at this time. The necessary courses of action were discussed with the Departments of Education, Labour and Health.

In July, a visit was made to Gaultois, Hermitage Bay, following contamination of well water with Polychlorinated Biphenyls (PCB's) from a transformer station to answer questions asked by concerned citizens regarding adverse health effects.

Following the opening of schools across the province, small outbreaks of measles were reported from most parts of the province. Investigations of these outbreaks together with those carried out in previous years indicate that measles vaccine given at 12 months of age protects about ninety out of a hundred children vaccinated. In those children where the vaccine was administered at nine months of age, protection is not satisfactory and up to twenty-five out of a hundred children may develop the disease.

In September 1980, the Department adopted the immunization schedule for infants and children as recommended by the National Advisory Committee on Immunization and endorsed by the Canadian Paediatric Society. This schedule reduces the number of procedures in schools and thus, results in the saving of Public Health Nurse's time. (See table 12.2 in Statistics Section).

The revised schedule together with the booklet "A Guide to Immunization for Canadians" was circulated to all Public Health Nurses and to physicians taking part in the immunization program.

The annual survey of the immunization status of school entrants in 1980 revealed again a satisfactory status. Statistics for the year 1980 indicate that the number of doses administered was about the same as in 1979 save for a reduction in the number of doses of D.T. Polio vaccine resulting from the changed schedule introduced this year. In the metropolitan St. John's district, 78% of vaccine for preschool immunization was distributed to fee for service physicians and 22% to Public Health Nurses. For the rest of the province, 6% of vaccines were distributed to physicians and 94% to Public Health Nurses.

In October, influenza virus vaccine was made available to physicians throughout the province for administration particularly to persons over 65 years of age and to persons with chronic heart or lung disease. A total of 8,500 doses of vaccine were distributed. All requests for vaccine could not be filled because there was a shortage of vaccine supplies at the manufacturers level.

A measles vaccination program had been introduced in Newfoundland in 1966. Available statistics indicate epidemic measles had been controlled for ten years. In 1977 and in 1980, there had been a resurgence of measles and questions had been asked regarding the value of the measles vaccine in providing protection against the disease.

A number of vaccine efficacy studies have been carried out in the province. The results indicate that children who received measles vaccine at nine months of age, which was the recommended age between 1966-72, have a 18-20% chance of developing the disease. In those children vaccinated at twelve months of age, the recommended age since 1972, the chance of developing the disease is reduced to 8-12%. These results indicate that significant benefits can be achieved by continuing to pursue the measles vaccination program vigorously and by making sure that all children receive the vaccine at one year of age.

The clinic at the Public Health Services Building, Forest Road, provides immunizations and international immunization certificates for cholera and yellow fever to persons travelling abroad. In addition, malaria prescriptions are issued to persons travelling to listed malaria zones. There were 1,564 visits for vaccinations in 1980. In 1976, there had been 2,924. The decline in the number of visits is related to the discontinuation of smallpox vaccination as a requirement for travel to most countries in the world.

During 1980, 5 incidents of food poisoning were investigated. In 3 of these incidents Salmonella food poisoning organisms were isolated from sick persons and in 3, cold plates were the probable vehicle of infection. In one case where 626 cold plates were prepared sold and distributed through home delivery, an outbreak of salmonella food poisioning occurred. 45% of persons eating were affected. The agents identified were S. typhimurium and S. Saint-Paul isolated to left-over ham. In yet another case, 40 children and 12 adults contracted food poisoning from liver and gravy. The etiological agent identified was Colostendium perfrengus. Inadequate refrigeration was noted in 4 incidents and in 1 incident the proper thawing and roasting times for frozen turkey were not followed.

Prevention of such outbreaks of food poisoning depend upon the education of persons handling food so that they understand the basic principles relating to storage and temperature of foods. They also need to be given information that poultry products, if not properly cooked and refrigerated can be the cause of Salmonella food poisoning.

The trend in the incidence of gonorrhea has been upward since the mid sixties. In 1980, it was the most commonly reported infectious disease with a total of 802 cases, the highest count on record. Considerable regional variations have been noted in the incidence of the venereal disease gonorrhea. While these variations may be influenced by reporting practices, the higher rates experienced by some regions indicate a need for an increased emphasis on all aspects of venereal disease control in these particular regions.

The Department of Health continued to operate a walk-in V.D. Clinic during 1980. The Clinic is now located in the Public Health Services Building, Forest Road, St. John's. Several cases of non-specific urethritis were diagnosed and treated during the year. Other sexually transmitted disease diagnosed and treated include venereal warts, trichomoniasis, and pediculosis pubis.

The register of cases treated for syphilis was utilized by physicians and hospital infection control nurses to determine the treatment status of persons found to have a positive serology on laboratory testing.

Health Education has an important role to play in combatting venereal disease through an understanding of the causes of venereal disease. Early recognition of symptoms and prompt treatment reduce the opportunities for the venereal disease to spread. To this end 8,144 pamphlets were distributed, 128 films were shown, and 4,487 people attended these films.

Table 12.0

Communicable Diseases Newfoundland, 1976-1980

Communicable Disease	1976	1977	1978	1979	1980
Diphtheria	1	0	0	0	0
Pertussis	240	4	20	80	95
Tetanus	2	2	0	0	0
Poliomyelitis	1	0	0	0	0
Measles	323	1094	39	32	756
Mumps	23	218	377	496	175
Rubella	16	29	21	21	48
Typhoid & Paratyphoid	1	0	3	12	0
Salmonellosis	74	217	229	144	162
Hepatitis A	213	128	14	5	8
Hepatitis B	26	28	13	7	4
Gonorrhea	792	688	621	674	792
Syphilis	13	9	12	2	5

Table 12.1

No. of Doses of Vaccines and Immunization Status of School Entrants Newfoundland 1976-1980

No. of Doses of Various Vaccines	1976	1977	1978	1979	1980
DPT Polio	45958	32713	29861	25915	27522
DT Polio	29342	30432	26049	32148	19382
MMR	9788	8826	8011	6951	7046
Rubella	5850	9423	5856	4707	4741
Immunization Status of School Entrants					
DPT Completed (DPT & P, 1980)	88%	90%	89%	91%	91%
MMR Completed	83%	89%	95%	92%	94%

13. TUBERCULOSIS CONTROL DIVISION

The aims of the Division of Tuberculosis Control are to limit the spread of tuberculosis infection, and to minimize illness and death in those infected. These aims are achieved by the early diagnosis and adequate treatment of active cases of tuberculosis, and the judicial use of chemoprophylaxis in others infected. Antituberculosis drugs used in treatment or chemoprophylaxis are provided free of charge.

The Tuberculosis Service, which applies to the entire population, has been integrated to a major extent into the general medical care delivery system of the Province. Active cases of tuberculosis are usually investigated and started on treatment in one of the designated general hospitals - St. John's (St. Clare's), Corner Brook (Western Memorial), St. Anthony (Charles S. Curtis) or North West River (North West River Hospital). Patients are then

continued in treatment on an out-patient basis under the care of a chest physician or other specialist in cooperation with their family doctor. The Division provides consultation, information and facilitation. While involved to a greater or lesser extent with all its programs, the Division must also rely on other agencies for assistance in the implementation of its programs such as Screening of Tuberculosis Contacts and Tuberculin Screening of School Children.

During the year 1980, there were 89 cases of active tuberculosis notified in the Province. Of these, 51 were male and 38 female. 68 had "respiratory" forms and 21 had "non-respiratory" forms of the disease.

The number of notified cases has varied from year to year (1977-90; 1978-115; 1979-75; 1980-89). The 1980 Tuberculosis Incidence Rate for the Province was 15.3 which compares unfavourably with the 11.4 Canada rate (Tables 13.0 and 13.1).

The deaths during 1980 of 5 Newfoundland residents were attributed to tuberculosis, giving a Tuberculosis Mortality Rate of 0.86 per 100,000 population. 1 male aged 49 died of active pulmonary tuberculosis - deaths in the remaining 4 persons were attributed to late complications - the tuberculosis itself, being then inactive. In 1979, 4 deaths in Newfoundland and 133 in Canada gave identical Tuberculosis Mortality Rates of 0.6 for both. The 1980 Canadian Tuberculosis Mortality figures are not yet available. (Table 13.0).

A total of 759 patients received anti-tuberculosis drugs during the year 1980, 226 in treatment and 533 in chemoprophylaxis.

An inventory taken on Dec. 31, 1980 showed that on that day 92 patients were receiving anti-tuberculosis drugs in treatment of tuberculosis - 42 patients (31%) less than the 134 patients receiving treatment on Dec. 31, 1979; 4 patients were hospitalized, the remainng 88 were out-patients. 57 patients (62%) were under treatment for respiratory forms of tuberculosis and the remaining 35 patients (38%) for non-respiratory forms.

On Dec. 31, 1980, 230 patients were receiving anti-tuberculous chemoprophylaxis - a decrease of 46 patients (17%) from the Dec. 31, 1979 figure of 276. (Table 13.2).

During the 1980-81 school year, public health nurses of the Provincial Department of Health and of the Grenfell Regional Health Services Board conducted a Tuberculin Testing Program on school entrants and Grade X students. 9,932 (94.5%) of the 10,510 Kindergarten and 9.246 (95%) of the 9,733 Grade X students in participating schools were accounted for. INAH chemoprophylaxis was offered to all "no lesion reactors" who had not previously received such medication.

Of the 9,932 Kindergarten children accounted for:

8 (0.1%) were BCG vaccinated	(0.1% in 1978-79)
9,916 (99.8%) were Tuberculin Negative	(99.8% in 1978-79)
8 (0.1%) were Infected with Tuberculosis	(0.1% in 1978-79)

Of the 8 Kindergarten children infected with Tuberculosis, 7 were previously known and 1 was newly discovered.

4,174 (45.1%) were BCG vaccinated	(74.3% in 1978-79)
5,036 (54.5%) were Tuberculin Negative	(25.3% in 1978-79)
35 (0.4%) were Infected with Tuberculosis	(0.4% in 1978-79)
1 was Tuberculin Dubious	

Of the 35 Grade X students infected with Tuberculosis, 28 were previously known and 7 were newly discovered.

During 1979, Nurses in the Grenfell Region BCG vaccinated 189 children, including 61 newborn babies in Northern Labrador. This brings to a total 413,991 BCG vaccinations done in the Province since the inception of the BCG Vaccination Program in February 1951. The BCG Vaccination Program in Northern Labrador was discontinued as of December 31, 1978 - the program for other Newfoundland children having been discontinued in 1975.

During the 1978 - 1979 school year, public health nurses conducted a Tuberculin Screening Program in Newfoundland schools. This program included school entrants, Grade V students and those in Grade X who had not previously been BCG vaccinated. The survey showed that 10 Kindergarten students (0.5%), 56 Grade V students (0.5%) and 36 (0.4%) Grade X students were infected with tuberculosis. No active cases of tuberculosis were found among these school children. Anti-tuberculosis drugs in chemoprophylaxis were offered to infected children who had not previously received them.

Table 13.0

Tuberculosis Morbidity and Mortality Rates, Nfld., 1966-1980.

Year Calendar	Total Morbidity		Mortality			
			Number		Rate	
	Nfld.	Can.	Nfld.	Can.	Nfld.	Can.
1966	68.1	26.3	30	669	6.0	3.3
1967	53.8	26.6	16	658	3.2	3.2
1968	55.8	26.9	15	630	3.0	3.0
1969	59.7	24.3	10	526	1.9	2.5
1970	51.0	21.2	14	527	2.7	2.5
1971	41.9	21.2	16	447	3.1	2.1
1972	40.5	20.5	10	453	1.9	2.1
1973	34.0	18.7	14	408	2.6	1.8
1974	30.6	16.8	6	330	1.1	1.5
1975	30.9	15.6	6	278	1.1	1.2
1976	21.8	11.3	6	264	1.1	1.1
1977	16.0	13.7	3	216	0.5	1.1
1978	20.1	12.5	3	220	0.5	.9
1979	13.0	11.8	2	133	0.6	0.6
1980	15.3	11.4	5	-*	0.8	-*

Rates per 100,000 population. These are notified cases.
*Canadian figure not yet available

14. NEWFOUNDLAND & LABRADOR PUBLIC HEALTH LABORATORIES

The Newfoundland and Labrador Public Health Laboratories contribute to the prevention, detection, and control of communicable disease with a comprehensive range of microbiological, diagnostic, reference, and consulting services. The laboratory also acts as a central reference centre regarding the laboratory detection of communicable disease in the province. A close liasion is maintained between the Federal Laboratory Centre for Disease Control and our Provincial Medical Services and Public Health Inspection Divisions in the exchange of epidemiologically significant findings and technical information.

This year, 98,394 specimens were examined with a workload of 3,439,667 Statistics Canada Units. This represents a slight increase in both specimens and workload over last year. (See table 14.0)

There was a slight increase during 1980 in the number of specimens examined for the presence of tuberculosis organisms (10,743 vs 10,360 for 1979). A total of 428 specimens were positive for mycobacteria and all isolates were identified to species level. There were slight decreases in the number of specimens tested for syphilis (34,055 in 1980 vs 36,771 in 1979) and for gonorrhoea (1,141 in 1980 vs 1,338 in 1979).

The Enteric Bacteriology Laboratory cultured 2,247 fecal samples this year and found 286 to be positive for salmonella. Twenty different serotypes were identified. An additional five specimens were positive for Shigella and 63 specimens were positive for E. Coli serotypes associated with gastroenteritis. Campylobacter fetus subsp jejuni, a recently recognized bacterial agent causing gastroenteritis, was isolated from 24 specimens. Yersinia enterocolitica, another organism associated with gastroenteritis, was isolated from 18 specimens; 9 cases ocurring in hospitalized patients. This observation is considered to be the second reported nosocomial incident due to Yersinia enterocolitica and the first to be reported for serotype 0:5 biotype 1. These findings have been submitted for publication in a scientific journal.

The Parasitology Reference Laboratory experienced a decrease in both workload and positive findings (1,059 specimens with 67 positive findings vs 1,485 specimens with 135 positive findings for 1979). This decrease represents a return to levels normally encountered during recent years. Last year's parasitological findings were abnormally high throughout all of Canada because of the high number of refugee immigrants requiring medical examination.

The number of samples processed by our Sanitary/Environmental Microbiology Laboratory showed a slight decrease from the previous year (8,817 vs 8,936). There was however an overall increase in the workload for this section because of the types of specimens examined and the number of tests performed (377,338 units vs 337,746). A considerable portion of the work performed in this laboratory section involved the checking of private and public drinking water supplies as well as the

regular monitoring of dairy products and the detailed analysis of food suspected of having caused food poisoning.

In an effort to determine the reservoir of salmonella organisms most frequently associated with human illnesses our laboratory cultured 156 samples of raw chicken collected by Public Health Inspection Services Division personnel in Regional Offices at Corner Brook, Grand Falls, Harbour Grace, and St. John's. Eighteen samples were found to be positive for salmonella, and 8 Salmonella serotypes were isolated. A comparison of the serotypes isolated from 82 sporadic primary human cases of salmonellosis which occurred in Newfoundland during the period of our chicken survey (June to October, 1980) indicated that the serotypes isolated from chicken accounted for 80% of human salmonellosis. Although there were no incidents of salmonella food poisoning outbreaks attributed to chicken in Newfoundland, the occurrence and the frequency of salmonella serotypes in chicken and in humans suggest chicken may be a significant source of human salmonellosis both in this province and throughout Canada. Our findings have been submitted for publication in the technical literature.

There was a slight rise in the number of requests for Rubella Serology this year (15,149 vs 14,579 last year). The demand for this testing procedure will decrease as rubella infections are reduced by determining the immune status of women of child bearing age followed by vaccination of those found to be non-immune.

Our Laboratory Stores Section maintains an inventory of approximately 1,100 stock items both for internal use and for distribution to Cottage Hospitals. In addition, a major role of Stores is the preparation of specimen collection and mailing kits of which 349,151 were prepared and distributed this year. The other major ancillary service section of the laboratory is that of Media Preparation. This year 107,100 items of Petri dish media were prepared and 118,156 tubes/bottles of liquid media were produced.

Our Microbiology Proficiency Testing Program was maintained during 1980. Unknowns for identification were distributed to all hospital microbiology laboratories throughout the province. This program is an important aspect of our continuing education. It serves to assist the development of skills in defined areas, compares various methodologies in practice, and pinpoints problem areas. The program is also used to familiarize technical personnel throughout the province with the latest developments in the field of clinical microbiology.

During 1980 considerable effort was made in reviewing and upgrading technical methods used in various sections of the laboratory including Mycobacteriology, Enteric Bacteriology, Parasitology, and Serology. The serological diagnosis of toxoplasmosis was added to our list of routine services, and methodology has been standardized for the diagnosis of gastroenteritis caused by Rotovirus. This diagnostic service will be added to our routine during the forthcoming year.

In October 1980, our laboratories hosted the 17th Annual Convention of the Newfoundland Branch of the Canadian Society of Laboratory Technologists. The two days of scientific presentations included a review of new developments in the field of clinical bacteriology. These annual meetings constitute an important role in the continuing education of technologists throughout the province.

The Public Health Laboratories act as the provincial repository for statistics and records for laboratory confirmed communicable diseases. This year in an effort to improve communications and to provide prompt epidemiological data, the laboratories initiated the release of a weekly resume of all significant microbiological laboratory findings, the content of which is compiled from weekly reports received from hospital laboratories throughout the Province combined with the findings of our own laboratories. In this manner, hospital laboratory staff and Medical Health Officers were promptly informed regarding the type(s) and number of communicable disease being comfirmed by laboratories throughout the Province, and of the geographical region in which these diseases are occurring.

During the year the Laboratories were located to temporary facilities so that renovations could be undertaken on our permanent quarters. With the completion of renovations scheduled for early 1982, the Division of Laboratories will be better equipped to provide further expansion of microbiological diagnostic services.

Table 14.0

Newfoundland and Labrador Public Health Laboratories.
1978-80

Activities	1978-1979 Specimens	1978-1979 Work Units*	1979-1980 Specimens	1979-1980 Work Units*
Lab:				
Chemical Specimens Examined	88,189	2,318,375*	89,577	2,321,329*
Evaluation of Sanitary Environmental Standards	8,936	337,746*	8,817	377,338*
Quality Control, Proficiency Testing and Standards		167,535*		216,756*
Evaluation and Upgrading of Methodology		97,161*		60,485*
Environmental (Laboratory) Maintenance		85,520*		60,886*
Teaching (intramural and extra mural)		58,881*		88,500*
Other		154,162*		314,373*
TOTAL	97,125	3,219,380*	98,394	3,439,667*
Stores:				
Specimen Collection Services Prepared and Distributed		214,912		349,151
Cultures Sent Out to Reference Labs		1,698		1,758
Orders for Lab Supplies Processed		3,700		3,972

* Statistics Canada Clinical Laboratory work units. Units include the preparation of all routine culture media.

15. PUBLIC HEALTH NURSING DIVISION

The objectives of the Public Health Nursing Division are: to promote health and prevent disease and disability of individuals, families, and communities; to provide nursing care for non-hospitalized sick and disabled so that they may attempt to function at their optimum capabilities; to effect change in health related disciplines and community agencies; and finally to initiate, participate in and utilize studies and research in nursing and related services. These objectives are achieved through five major programs - Maternal and Child Health, School Health, Communicable Disease Control, Home Care, and Curative Care, which are described in the Program Appendix. Statistics for these programs are given in Table 15.0.

The Division is administered by five staff members at the central office in St. John's and six regional supervisors. In the field, there are 115 public health nurses operating out of 66 offices around the province.

Maternal and Child Health. Public Health Nurses are involved in prenatal clinics, and they conduct prenatal classes and make prenatal and postnatal home visits. It is not necessary for parents to be referred by a physician for the prenatal classes, which provide instruction and exercises related to childbirth. Postnatal services are provided upon referral by the hospital concerned, or following prenatal care. Postnatal visits, which constitute the major activity in perinatal care, are made by public health nurses as soon as possible after mother and baby return home, to give general advice on feeding, growth, development, and to give immunization. In some areas of the province, walk-in clinics and breastfeeding clinics have been started, and these have been well attended.

Although the provincial birth rate is now showing a decline, some public health nursing services show increased utilization. In 1979 and 1980 the number of prenatal classes increased over the previous two years and there was a corresponding increase in attendance (523 vs. 726). Moreover, an increasing number of men are accompanying their wives to these classes. The numbers of postnatal home visits increased from 19,311 to 21,177 between 1979 and 1980-81, which shows the increasing concern for healthier infants.

Child Health Clinics continue to be held in all nursing districts, with locations accessible to the majority of families. At these clinics the public health nurse provides immunization, counselling, growth and development-screening assessment as time and personnel permit. Attendance in some districts is high, whilst in others it has decreased where family medical services are now more available. Public Health nurses are also involved in the preschool medical examination progam, (assisting in the examination), and making home visits when necessary.

School Health. The Services provided to school children include physical assessment, vision and hearing assessment, immunization, health education, student health

counselling, and follow-up contact with parents. Some of these services are routinely provided to all schools, but schools may also refer individual children.

The overall time spent in schools has remained constant over the last few years, and the only marked change in service has been the steady reduction in rapid classroom inspections. This program continues to contribute a great deal to the health and education of school children through early identification of and intervention for visual, hearing, and other medical problems, and through health education and counselling. It is noticeable that a greater number of children were physically examined in 1980 than in 1979 (7,594 vs. 4,029).

16. PUBLIC HEALTH INSPECTION

The aim of the Public Health Inspection Services Division is to prevent the spread of disease originating in the environment. This objective is achieved through a variety of operational programs including the following: inspection of public eating and food processing establishments; monitoring the quality of water supplies for both human consumption and for recreational purposes; ensuring that sewage disposal facilities are acceptable; investigation of complaints concerning unsanitary conditions; monitoring the sanitary environment in schools; and the organization of education activities with a view to promoting environmental health. Figures in the discussion to follow are, for the most part, presented in Table 16.0.

The Division is administered by a Director and an Assistant Director in St. John's. There are 9 district offices with staffing of 9 supervisors, 32 inspectors, and 15 clerical stenographic support staff.

Housing inspection requests are received from housing authorities, government departments, and other agencies and from residents of tenement housing. 360 inspections were recorded during the year. Reports with recommendations for correction of all basic housing deficiencies were made, and evidence was presented at hearings conducted by the Residential Tenancies Boards when requested. Vacant housing units, determined as unfit for human habitation, were placarded to prevent further occupancy and subsequently arrangements were made for their removal.

The scope of the Residential Rehabilitation Assistance Program (RRAP) was expanded resulting in a corresponding increase in requests for inspections of existing housing units. Some district offices were heavily involved with this program and extra assistance was provided in order to implement it.

Communicable Disease Control. The number of patients with tuberculosis is steadily decreasing, while the number of patients with other communicable disease is less in 1980-81 than the previous two years. Visits to these patients have decreased correspondingly.

Home Care. The trends toward early discharge from hospital, and increasing referrals from community physicians are reflected in a greater demand for home care services. Home care is provided to pediatric, adult, and geriatric patients. Patients with medical problems have the greatest demand at all ages for home care while geriatric medical patients receive the greater number of visits (29,791) in 1980-81. In total, there were 73,542 home visits in 1980-81 and 72,559 visits in 1979-80.

In coastal Labrador, activities in connection with Native Housing Programs were minimal as no new home construction was undertaken.

All schools in the province are programmed for regular inspection. Present emphasis is on the bacterial quality of drinking water, food sanitation in cafeterias and lunchrooms, control of vermin, housekeeping and general maintenance. Unserviced sites for new school buildings are assessed and building plans are examined. In all, 451 inspections of schools were recorded. Included in this category are nursery schools, day-care centres, vocational schools, etc.

All hospitals and other institutions receive regular inspections of food service facilities and practices. In all such establishments where catering firms operate food service, departments are licensed. A close liason is maintained with dietary and infection control personnel. Included in this category are all homes for special care.

Although some places of work warrant and receive more frequent inspection than others, activities in the category are largely confined to complaints/requests which involve special problems peculiar to the nature of the operation. Areas of concern include lunchrooms, cafeterias, micro-wave ovens, waste supplies, and sanitary facilities. Lighting and ventilation and commercial establishments are included in this category.

Examples of facilities involved are ice arenas, playgrounds, swimming pools and natural bathing areas, summer camps, trailer and camping parks and special events such as circuses, fairs, and civic holiday celebrations. In addition to basic environmental health facilities, carbon monoxide levels are monitored in

Training courses for food service personnel were organized at St. Anthony, Plum Point, Happy Valley, and Labrador City - Wabush, and Grand Bank. These were in co-operation with the Newfoundland Restaurant and Food Services Association. Nine other educational programs were provided in Grand Bank, Harbour Grace and St. John's.

Public awareness and other input activities included 26 meeting seminars, teach-ins, lectures, etc., involving municipal councils, special interest groups, other authorities and agencies, and citizens groups.

The Annual Refresher Course for Public Health Inspectors in the Atlantic Provinces was held at Hotel Newfoundland in St. John's in November 1980. Inspectors representing all districts attended this very popular course which is sponsored by Dalhousie University in cooperation with the Departments of Health in Atlantic Canada.

Other inservice educational activities involved 22 inspectors and support staff attending 11 different courses and workshops.

A significant development occurred in April 1980. Public health services were regionalised in the western region of the province. This Division was involved in the process which was accomplished without difficulty. Plans are well in hand in the Division for regionalization in other parts of the province.

Table 16.0

Public Health Inspection Division,
Selected Statistics Nfld., 1978, 1979 and 1980.

	1978	1979	1980
Inspections			
Food Control	12,877	13,386	10,928
Housing	663	604	360
Sanitation	14,232	8,446	8,437
Water Supply	9,611	10,420	7,825
Communicable Disease	226	309	302
Building Lots	NA	7,756	4,551
Pest Control	75	66	75
Rodent Control	78	75	39
School	570	584	451
Misc. Inspections	2,179	1,544	1,609
General Activities	14,650	15,137	14,611
TOTAL	55,161	58,327	49,188
Samples Taken			
Water	11,728	12,805	10,621
Milk	3,295	3,883	3,135
Licences Issued			
Department of Health Act (Swimming Pools)	34	35	27
Food & Drug Act:			
Eating Establishments	1,099	1,186	942
Sale, Prod. & Processing of Dairy Products	1,860	2,045	1,737
Mfg. and Sale of Ice Cream	2,922	2,937	2,327
Mfg. Processing and Sale of Meat Products	305	297	244
Breweries	4	4	3
Aerated Plants	3	2	2
Bakeries	44	50	44
Mfg. Confectionary Retail	3	3	2
Counter Freezers	200	199	190
TOTAL	6,474	6,758	5,518

17. HEALTH EDUCATION

The purpose of the Health Education Division is to increase the public's knowledge of health issues and awareness of self-imposed or environmentally related health risks. There are three key efforts used by the Division in promoting the effective use and distribution of scientifically accurate information. First, the division acts as a resource centre, maintaining a library of films and pamphlets, and critically evaluating incoming materials which are intended for public distribution. Second, the division produces and distributes from its own equipment 37 different pamphlets. Finally, the Education Division continually cooperates with and participates in programs developed by other Department Divisions for specific sectors of the population.

While the Division is located in St. John's, it operates regional depots for the distribution of printed or audiovisual materials. Physicians, public health

ice arenas, and swimming pools are checked for chlorine residual, pH, and bacterial quality of the water. Drinking water in provincial parks is also monitored regularly. Specific regulations and licensing apply to swimming pools which receive regular attention.

Because of their significance in the control of food borne illnesses, the production, storage, and processing of food and beverages are highly regulated and licensed trades. 5,495 inspections of food premises of all kinds were carried out. The operation of eating establishments and the processing of milk and milk products are of special concern in this category, and close surveillance of these operations continued regularly. 3,135 quality control milk and milk product samples were collected and tested. Foreign matter in foods and all other complaints about unsanitary food premises were promptly investigated.

In order to determine the extent and types of salmonella organisms in imported poultry, a survey was undertaken in cooperation with the Public Health Laboratory. Fast food outlets in four different areas of the province were included and involved some 160 specimens.

Investigation of questionable food stuffs associated with fires, floods, and national recalls is an important activity in a food control program. For example, condemnation and disposition of a large quantity of food ($300,000) followed a food warehouse fire in Bay Roberts. Some districts were involved in surveillance of a national recall involving imported canned mushrooms.

The Division is responsible for monitoring the bacterial chemical and physical quality of all public water systems as well as all other water supplies in public places. Schools, tourist establishments, institutions, and camping parks are examples of the latter. In all 10,621 samples were taken; for chlorine residual - 3,000; for bacteriological examination - 7,487; and for chemical and physical characteristics - 171. Any existing and potential public health hazards together with supporting data are reported to control agencies with specific recommendations for corrective action. There are approximately 425 bona fide communal water supplies in the province. Chlorination equipment has been provided for approximately 225. The remainder are untreated. Of those chlorinated, only about 30 (15%) are chlorinated effectively.

The preceding service is also extended to private individual water supplies. Inspection, testing, and advice on protection of existing and proposed supplies are provided on request. The major concerns in this program are the number of surface water supplies and the large percentage of supplies ineffectively chlorinated.

A major activity of the Division is building lot inspections in unserviced areas. All developments involving sewage flows less than 1000 gals./day are referred to the division for approval prior to the issuance of permits. This involves site inspections and the preparation of specific recommendations for each residential and some commercial building sites. Source of referrals are: Development Control authorities; Crown Administration; Municipal Councils; and others such as housing corporations and Canada Works projects. A total of 4,551 applications were processed. From May to October, all district offices are preoccupied with this activity. In the eastern region, demands for lot inspections are increasing steadily and the proliferation of development in unserviced areas without the benefit of proper planning is a cause for some concern. A further 18 sanitary surveys were conducted throughout the province.

Responsibility for all waste disposal rests with the Department of Environment. However, because of public health implications, the Division is involved with the investigation of nuisance complaints concerning improper waste disposal, especially in unincorporated communities.

Legal proceedings were instigated in 4 cases involving breaches of public health legislation. Five eating establishments were closed by order and another two were given the option of closing voluntarily. All reopened following satisfactory compliance.

This year, in a Newfoundland Court, the first civil action regarding a food poisoning incident was recorded. It is understood that the result was a mutually agreed settlement of $4,000.

Three confirmed outbreaks of food borne illness occurred during the year. They were investigated in cooperation with Medical Services. No outbreaks of communicable disease occurred, but 302 calls were made in connection with sporadic and suspected cases.

A very significant poisoning occurred during the year. Anti-freeze was used for frost protection in a hot water radiation heating system. A valve malfunctioned and allowed the anti-freeze to contaminate the potable water supply line. All members of one family were affected. The practice is quite unacceptable as it immediately creates a cross connection between a potable and a non-potable water supply.

As a result of the use of urea formaldehyde foam insulation (UFFI), a number of complaints have been received from people claiming they are experiencing discomfort. These are currently under investigation.

nurses and other health professionals are periodically advised of new acquisitions and are sent catalogues annually.

During the year, the division conducted 28 health promotion and orientation sessions for students and health professionals. In conjunction with the Medical Health Services Division a program was developed to link the objectives of Immunization Month with an effort to increase parental awareness of the need for immunization. A special promotion kit was developed and circulated to all Public Health Nurses containing a listing and samples of available material from the Division, immunization schedules, suggestions for local promotion of immunization, press releases, and posters and wall charts. In addition, 650 letters to physicians over the Ministers' signature were circulated, stressing the importance of prompt immunization and enlisting their cooperation in ensuring that their young patients have been properly immunized.

Operating as a resource centre, the Division had 1470 film and 2033 printed publication requests during 1981. Approximately 85,271 people attended films. Considering a large portion (72%) of the requests for both types of media, 51% came from public health nurses, and 12% came from other health professionals. The annual mimeograph production ran at approximately 203,500 pages and 165,300 pamphlets.

18. NUTRITION DIVISION

The purpose of the Nutrition Division is to encourage good eating habits which contribute to good health and to the prevention of disease. The Division provides nutrition education, consultation and information to community groups (e.g. pregnant women, parents, seniors, teens) and to health professional groups (e.g. physicians, public health nurses, teachers).

As the Division has hired 4 new staff members since 1980, a great deal of time was spent in orientation. A system of program planning based on needs assessment and community profiles was begun. Surveys of school food in western Newfoundland and nutrition priorities of public health nurses were undertaken. Nutrition was also a major component of the Fitness and Lifestyle workshops carried out for public health nurses.

Pamphlet review and publication were greatly aided by the addition of three summer students, as was development of promotional kits for breakfast and weight control.

The highlight of the year was our first Nutrition Week held in March which was hailed as a success. Promotion was extensive and much of it is reflected in the numbers of activities recorded here.

Media presentations included 35 radio programs, 13 television shows, and 7 newspaper articles.

Lectures were given to a range of audiences including 16 to health professional groups, 6 to teachers and parents group, 16 to school classes, 20 to prenatal classes, and 18 to adult groups. The content and emphasis of the activities is based on the priorities and needs of nutrition education in Newfoundland. This campaign covered a wide range of nutrition topics and involved the use of regular weekly radio spots (Corner Brook), weekly newspaper articles and many interviews in newspapers, on T.V., and on radio.

19. CHILD HEALTH SERVICES

The aim of the Child Health Services Division is to promote the health and development of preschool and school age children, giving emphasis to the early identification and treatment of mental and physical disorders that can interfere with learning and development. Child Health Services has representatives regionally located at Corner Brook, Grand Falls, Gander, and a centralized administrative staff at St. John's. Staffing includes pediatricians, physicians with pediatric experience, and one social worker.

Child Health Services work closely with Public Health Nursing Services, providing consultation regarding program development and evaluation, consultation and/or referral for individual children and their families. Activities concerning Well Baby Clinics, Preschool Examinations, and School Health Problems are described in the Program Appendix. In addition to these regular activities, staff have been involved with: programs for the Developmental Centre (for children with severe handicaps); review of the continuing and management of the Provincial Register of Handicapped Persons; a research project called Health Check Three, and Committee representation on the Provincial Perinatal High Risk Committee.

The skills and experience of Child Health Physicians or Community Pediatricians are needed in various regions but it is difficult to find doctors to undertake such work. Various methods of delivering services to children will have to be explored in light of the physician shortage and their attending regional disparities in supply.

Analysis of the Pre-School Medical Examination records, Vision Screening records, and Handicap Register data indicate a common problem. The data on children which have been and are being collected cannot accurately describe prevalence rates for type and severity of diagnoses nor can they describe accurately to what extent the patient has been followed. In each of these programs the reporting systems are presently under review.

Table 19.0

School Entrants Examination, Newfoundland, 1980-81

	Registrants	Seen	% Seen
St. John's	2,229	1,734	77.8%
Eastern Avalon	1,627	1,468	90.0%
Labrador City (1 School Board)	160	151	94.4%
TOTAL	4,016	3,353	83.5%

As shown in Table 19.0, 4016 school entrants elected to see either a child health or family physician in 1980-81. 83.5% (3353) were seen. Among 2229 registrants in St. John's 1734 were seen. Of those electing to see a child health physician, 92% were seen (1371). Of those electing to see a family physician, 55% were known to have been seen as confirmed by reports sent to the Child Health Division.

During 1981 measurement of arm circumference was taken routinely at the preschool medical examination. This was done to determine if it was practical and useful as an indicator for the referral of children at risk. It has been used in other parts of the world as a valuable screening tool for malnutrition.

Program Appendix

PROGRAM APPENDIX

PROGRAM	OBJECTIVES	POPULATION	LOCATION	METHOD & SERVICE
ADMINISTRATION				
1. Welfare &/or Social				
Senior Citizen's Drug Plan	To assist the population over 65 in obtaining prescribed drugs. Dispensing fee - $3.00; drug cost free.	35-40,000 throughout province.	Dept. of Health, St. John's.	Cards are presented to drugstore of choice. Drugs are dispensed and pharmacie s are reimbursed.
Immunization Program	To immunize Newfoundland School children against the vaccine preventable diseases.	Nfld. population.	Conducted by Medical Services Division, Health. Vaccines distributed by Central Supplies, Health, St. John's.	Vaccine preventable diseases are monitored by Division. Doses are estimated for number of preschool children. When nurses and physicians request a number of doses through Medical Services Division, vaccine is distributed from Central Supply.
Cystic Fibrosis Program	To supply cystic fibrotic patients with needed medications to reduce burden in the cost of needed medications.	62 patients.	Centrally located at Central Supply, Health, St. John's.	Regular monthly mailouts of drugs to Cystic Fibrosis patients from Central Supply.
Drug Indigent Program	To ensure that all individuals who cannot afford to bear the cost of prescribed medication may receive their medication.	30,000-35,000 throughout the Province.	Central Pharmacy, Health, St. John's. Local pharmacy and dispensing physicians.	Patients on long-term medication are serviced through the Central Pharmacy. Prescriptions are filled and mailed to patient. In areas where pharmacies are not located, physicians dispense drugs. For all other patients, drugs are obtained at a pharmacy. An agreement exists between Pharmaceutical Association and Department of Health for dispensing fees and drug cost.
Provincial Food Bank	To provide diet (or low cost diet) foods to patients with metabolic disorders. To prevent mental retardation in patients with congenital metabolic disorders.	20 patients.	Central Supply, Health, St. John's.	Diets are mailed to patients on request after approval of attending physician.
Hearing Aid Program	To supply to children and to adults declared indigent through certification by the Department of Social Services up to two hearing aids upon the recommendation of a certified otolaryngologist and a qualified audiologist.	Hearing Impaired children and adults in Newfoundland.	Administered through Audiology Department, The Dr. Charles A. Janeway Child Health Centre, St. John's, under the direction of an audiologist.	Hearing aids are obtained by tender, stocked at the Janeway unit, and distributed and serviced through the Janeway Audiology Department and other regional issuing centres, without cost to the user or his family.
Audiometer Calibration Program	To calibrate on an annual basis audiometers used for testing of hearing by public health nurses, child health officers, speech, and hearing as well as other medical and paramedical personnel.	Public health nurses, child health officers, audiologists and audiology technicians, speech pathologists, and otolaryngologists.	Audiology Department, The Dr. Charles A. Janeway Child Health Centre, St. John's.	Instruments requiring annual calibration checks are sent to the Audiology Department, Janeway Child Health Centre, largely by arranged rota.
10. DENTAL HEALTH SERVICES				
Children's Dental Program	To provide free dental care to children and groups of handicapped or disadvantaged children.	112,500 children up to their 13th birthday. School for the Deaf, Orphanages, Foster Children, Rehabilitation Centre, Cerebral Palsy, Social Assistance Recipients.	Administration: Health, St. John's. Service: Fee-for-Service Dentists throughout the province.	Services are provided by dentists in practices on a scale of fees negotiated between the Department of Health and the Newfoundland Dental Association. A smaller amount of service is provided at clinics at various locations such as the Dental Division, Harvey Road and the Janeway Hospital.

Recruitment of Dentists For Under-Serviced Areas	To provide bursary assistance to dental students; to recruit dentists from outside the Province; and to provide incentives in the form of establishment incomes to dentists engaged in Children's Dental Program.	General population, particularly in rural under-serviced areas, special emphasis upon children up to age 13.	Administered centrally, Health, St. John's.	Dentists establish practice (with Government assistance) in under-serviced areas. A minimum net annual income is guaranteed to placed dentists.
Preventive Educational Dental Health Program	To promote the prevention of dental disease through diet counselling, oral hygiene instruction and the use of decay inhibiting agents (eg. fluoride).	Population in general with particular emphasis upon children within the ambit of the Dental Care Program.	Administered centrally. Regional location of hygienists. St. John's, Labrador City-Wabush, Corner Brook, Grand Falls, Lewisporte and Gander.	Conducted through classroom talks, teacher workshops, radio and T.V. appearances, well baby clinics, clinical sessions involving oral hygiene instruction, diet counselling, application of topical fluoride to prevent tooth decay, etc. Grants are available to assist in the purchasing and installation of fluoridation equipment and in the system operation and maintenance costs.
12. MEDICAL SERVICES				
Infectious Disease Surveillance	To monitor and where possible institute measures designed to prevent or control the spread of infectious diseases.	Residents of Newfoundland.	Central Office, Health St. John's. Regional Office in Corner Brook.	Physicians and public health nurses notify Division. Epidemiologists assess situation on a continuing basis and may investigate if situation warrants action.
V.D. Surveillance	To monitor and where possible institute measures designed to prevent or control the spread of venereal diseases.	Sexually active population in Newfoundland.	Monitoring done through St. John's office. Walk in clinic, St. John's. Maintained by Division.	Persons with V.D. may voluntarily report themselves for treatment. Otherwise physicians must notify Division so that contact investigation can begin.
Vaccination for International Travellers	To provide Newfoundland Residents travelling abroad with protection against vaccine preventable diseases in other countries.	Any resident travelling abroad.	Certain vaccines must be administered in St. John's whereas others will be administered by physicians elsewhere.	Free immunization is given to travellers. Physicians administer some vaccines. Certain vaccines (for yellow fever) must be administered in St. John's.
13. TUBERCULOSIS CONTROL				
Provision of Anti-Tuberculosis Drugs Free of Charge.	To ensure that all individuals requiring anti-tuberculosis drugs in treatment or in chemoprophylaxis can receive appropriate and adequate treatment.	Population of Province. Tuberculosis Patients.	Central Pharmacy, Health St. John's. Distribution to chest clinics, hospitals and T.B. Control offices.	In-patient medication is supplied through hospital or chest clinics. Out-patient medication is supplied through chest clinics and Tuberculosis Control offices at St. John's and Corner Brook.
Tuberculin Screening of School Children	To identify those who have been infected with tuberculosis and to ensure that adequate and appropriate anti-tuberculosis drugs are given in treatment or in chemoprophylaxis where indicated.	School children of Province: at School entrance, then at Grade V level and those not known to have had BCG vaccination at Grade X level.	Schools in Province.	Tuberculin skin tests are performed by school nurses with referral to family physician or chest clinic if skin test positive without benefit of BCG vaccination.
Screening of Tuberculosis Contacts.	To identify contacts of infectious cases of tuberculosis to determine those who have become infected by the index case (or in the case of a newly infected active case - the source of that infection) and to ensure adequate treatment or chemoprophylaxis as indicated in those found to be infected.	Contacts of active cases of tuberculosis.	Local and regional contacts' homes, public health nurse's and doctor's offices, hospitals, chest clinics, and T.B. control offices, (St. John's and Corner Brook).	When an active case of tuberculosis is found, the local public health nurse is usually advised, through T.B. Control office. A list of contacts associated with the active case is obtained by Chest Clinic staff, or, by a public health nurse. The public health nurse either refers or does 5 T.U. PPD Mantoux skin tests and arranges for chest x-rays on contacts. (continued)

Screening of Tuberculosis Contacts (continued)				Further examinations are done as indicated at a three and at a further six month interval.
14. PUBLIC HEALTH LABS				
Clinical Diagnosis, Reference, and Consultation	To prevent, detect, and control communicable disease.	Total population, particularly health professionals and facilities (for reasons which may apply to the total population).	Central, Health, St. John's. The Leonard A. Miller Centre For Health Services.	Offers comprehensive range of bacteriological, serological, parasitological and mycological, services to all hospital laboratories, physicians, health agencies, and Public Health Programs.
Environmental Protection	To prevent, detect, and control communicable disease.	Total Population	Central, Health, St. John's. The Leonard A. Miller Centre for Health Services.	Bacteriological evaluation of drinking water, recreational water, dairy products, equipment and environment of food handling establishments for the Public Health Inspection Services. Bacteriological evaluation for hospitals and other health care facilities, and environmental and health related agencies operated or approved by Federal and Provincial governments. Bacteriological water analysis is also provided to private individuals, and to city and town councils.
15. PUBLIC HEALTH NURSING PROGRAMS				
Maternal and Child Health	To promote good maternal and child care; that is, to enhance the proportion of healthy woman giving birth to a full term infants and to increase the likelihood of normal growth and development in preschool children.	Expectant parents; mothers and newborns, preschool children (infants to 5 years).	Public Health Nurses at Community level.	Aims realized through: prenatal clinics; home visits and prenatal classes; post-natal visits; well baby clinics and preschool clinics and health home visits.
School Health	To maintain and improve the health of the individual child; to promote health education and physical education; and to maintain the health standards of the school evnironment.	School age population in Newfoundland.	Public Health Nurses at Community level.	Aims realized through regular visits to the school for physical examination, immunization, health education, student health counselling and follow up home visits.
Communicable Disease Control	To prevent and control communicable diseases.	Newfoundland population.	Public Health Nurses at Community level.	Work in conjunction with T.B. Control and Medical Services Communicable Disease Program. Aims realized through immunization clinics, testing, health education, contact and patient follow up, home visits, venereal treatment (clinics in St. John's only).
Home Care	To provide continuity of care and rehabilitation in the home.	All segments of population including chronically ill, psychiatric and geriatric cases.	Public Health Nurses at Community level.	Work with existing 3 Home Care Programs based in hospitals. Work is also independent of Hospital Based Programs. Services provided are: direct nursing care; teaching nursing care procedures to the patient and family; providing supportive assistance to patient and family; encouraging medical care at appropriate intervals; guiding family and patient in the appropriate utilization of other community resources.

Home Care (continued)				Work with Community Based Home Care Program in St. John's.
Curative Care	To provide a service to the ill where there is no professional medical service immediately available in rural and outlaying areas.	All segments of population in 3 distinct geographical areas.	Public Health Nurses in the Ramea, Lamaline, St. Bride's areas.	Goal realized through clinics and home visits. Three regional nurses involved.
16. PUBLIC HEALTH INSPECTION				
Food Control	To prevent outbreaks of food borne illness or disease; to maintain sanitary standards and/or to preclude operations of premises when sanitary standards cannot be maintained.	Owners, operators, employees, all establishments in which food is prepared, stored, or processed for sale to the public. Interested groups.	Decentralized to district health inspectors.	Routine inspection of premises, collection and analysis of food samples and organized educational programs. Issuance and withdrawal of licenses.
Sanitation	To ensure the suitability and adequacy of sewage disposal systems for location, construction and operation relative to occupancy, lots, unserviced lands and adjacent lots. To minimize potential health hazards resulting from inadequate or inappropriate sewage.	All individuals, firms and companies intending to develop unserviced land or to modify existing systems for commercial or residential purposes. General public for educational purposes.	Decentralized to district health inspectors.	Site inspection, evaluation and provision of plans and specifications. Investigation initiated through complaints (of unsanitary conditions). Educational materials are distributed to interested parties or persons needing corrective action. Limited education program available to students, i.e. film etc.
Water Quality	To ensure that water supply sources, both private and public, are of acceptable quality for drinking and recreational purposes, in order to prevent the spread of water borne illness. To advise general public and local authorities on water quality requirements. To approve the location, construction and treatment of facilities for private and public drinking and recreational activities.	All new water supply sources, of present systems, impinging upon others. Similar to Sanitation above. Applies particularly to municipalities, parks, water plant operators.	Decentralized to district health inspectors. Equipment, etc. for testing available on district level.	Monitoring of public and private water supply sources through sampling and analysis. Referrals from Department of Consumer Affairs where daily flows exceed 100 gallons. To advise and educate general public, officials and operators, etc.
School Sanitation	To promote a clean health school environment considering such factors as: lighting, ventialtion, water supply and sewage disposal; and the preparation and/or distribution of food within schools.	All school children and teachers within the Province.	Decentralized to district health inspectors.	Routine inspections of schools at district levels. Educational materials etc., disseminated at school level.
Communicable Disease	See report of Medical Services Division.			Investigations are carried out by inspectors who are being guided by the Medical Services Division.
18. NUTRITION DIVISION				
Prenatal Nutrition	To teach expectant mothers the importance of eating well balanced meals during pregnancy and lactation.	Expectant parents attending the nutrition classes as part of the prenatal classes.	Regional: Centralized to St. John's, with nutritionist located in Corner Brook.	Organized in conjunction with public health nursing: Counsel prenatal referrals, teach nutrition at classes, and provide nutrition pamphlets and information.
Infant Nutrition	To instruct parents on the amount, kind and schedule of introduction of foods for their infants and preschool children.	Specific mothers or parents who request information or are in attendance at particular classes or workshops.	Regional.	Counsel mothers at Corner Brook Child Health Conferences. Provide information on infant feeding and homemade foods in response to requests by telephone, letter or office visits. Indirect service, backup service to public health nursing.
Nutrition Education in School	To encourage good eating habits among school children and the serving of nutritional foods in school; and to promote nutrition education in the classroom.	School children and teachers in Newfoundland.	Regional.	Distribution of literature and contacts with School Boards. Presentations at: home, school, classrooms. Workshops for teachers; school (continued)

Nutrition Education in School (continued)				visitations; attendance at teacher staff meetings; counselling regarding weight control; and providing backup to public health nursing.
Nutrition via Mass Media	To encourage good eating habits among Newfoundland population.	Newfoundland population.	Regional.	Weekly radio spots, monthly radio spot, T.V. and radio interviews. Weekly articles for newspapers. Experimental programs via satellite.
Nutrition Consultation Service to Professionals	To provide nutrition consultative service and information that other professionals may use in their direct contact with the public.	Professionals in delivery of nutritional health; university students, and students in school systems.	Regional.	Conduct workshops. In-service education of public health nurses. Lectures to nursing and education students, etc.
Nutrition Consultation Service to Individuals and Community Groups	To encourage good eating habits among all age groups.	Communities and general public.	Regional.	Nutrition talks to community groups and distribution of literature per requests, both of which provide a consultation on a well balanced diet and weight control.

Statistical Section

HOSPITALS & OTHER FACILITIES IN NEWFOUNDLAND
MARCH 31, 1982

		LOCATION	T.	O.	S.B.
EASTERN REGION HOSPITALS (1-18)					
1A.	Health Sciences Complex	St. John's	Gen. F. T.	B	318
1B.	Health Sciences Forest Rd.	St. John's	Ext. Care	B	180
2.	St. Clare's Mercy Hospital	St. John's	Gen. F. T.	B	324
3.	S. A. Grace	St. John's	Gen. P. T.	B	313
4.	Dr. Charles A. Janeway	St. John's	Ped.	B	221
5.	Children's Rehabilitation	St. John's	Rehab.	B	42
6.	St. Pat's Nursing Home	St. John's	Ext. Care	B	20
7.	St. Luke's Nursing Home	St. John's	Ext. Care	B	29
8.	Waterford	St. John's	Psych.	B	400
9.	Dr. Walter Templeman	Bell Island	Gen. N. T.	G	40
10.	Old Perlican	Old Perlican	Gen. N. T.	C	48
11.	Carbonear General	Carbonear	Gen. N. T.	B	100
12.	Markland	Markland	Gen. N. T.	C	16
13.	Placentia	Placentia	Gen. N. T.	C	35
14.	Bonavista	Bonavista	Gen. N. T.	C	19
15.	Come By Chance	Come By Chance	Gen. N. T.	C	24
16.	Burin	Burin	Gen. N. T.	C	31
17.	St. Lawrence	St. Lawrence	Gen. N. T.	C	22
18.	Grand Bank	Grand Bank	Gen. N. T.	C	33
CENTRAL REGION HOSPITALS (19-28)					
19.	Harbour Breton	Harbour Breton	Gen. N. T.	C	19
20.	Brookfield	Brookfield	Gen. N. T.	B	38
21.	Fogo	Fogo	Gen. N. T.	B	18
22.	Notre Dame Bay	Twillingate	Gen. N. T.	B	69
23.	Sir James Paton	Gander	Gen. N. T.	B	162
24.	Botwood	Botwood	Gen. N. T.	C	53
25.	Central Newfoundland	Grand Falls	Gen. N. T.	B	208
26.	Springdale	Springdale	Gen. N. T.	B	31
27.	M. J. Boylen	Baie Verte	Gen. N. T.	B	40
28.	A. M. Guy	Buchans	Gen. N. T.	B	22
WESTERN REGION HOSPITALS (29-33)					
29.	Burgeo	Burgeo	Gen. N. T.	C	18
30.	Channel	Channel	Gen. N. T.	B	37
31.	Sir Thomas Roddick	Stephenville	Gen. N. T.	B	89
32.	Western Memorial	Corner Brook	Gen. N. T.	B	279
33.	Bonne Bay	Bonne Bay	Gen. N. T.	C	28
NORTHERN 34-48					
34.	Port Saunders	Port Saunders	Gen. N. T.	B	16
35.	Flowers Cove	Flowers Cove	CHC	IGA	2
36.	Roddicton	Roddicton	N. S.	IGA	6
37.	Conche	Conche	N. S.	IGA	6
38.	Curtis Memorial (IGA)	St. Anthony	Gen. N. T.	B-IGA	147
39.	Forteau	Forteau	N. S.	IGA	10
40.	Mary's Harbour	Mary's Harbour	N. S.	IGA	13
41.	Cartwright	Cartwright	N. S.	IGA	11
42.	Melville	Goose Bay	Gen. N. T.	IGA	40
43.	North West River	North West River	Gen. N. T.	IGA	45
44.	Makkovik	Makkovik	N. S.	IGA	6
45.	Hopedale	Hopedale	N. S.	IGA	6
46.	Nain	Nain	N. S.	IGA	7
47.	Churchill Falls	Churchill Falls	Gen. N. T.	IGA	4
48.	Capt. Wm. Jackman	Capt. Wm. Jackman	Gen. N. T.	B	51

NOTES:

Legend Type: NS=NURSING STATION; PED-PEDIATRIC; PSYCH=PSYCHIATRIC; CHC=COMMUNITY HEALTH CENTRE; EXT. CARE=EXTENDED CARE(NSG HOME GERIATRIC ETC.); REHAB=REHABILITATION; GFI=GENERAL FULL TIME TEACHING; GPI=GENERAL PART TIME TEACHING; GNT=GENERAL NO TEACHING

Operation: B = BOARD OPERATED; C = COTTAGE HOSPITAL GOV'T RUN; G = GOV'T RUN.

Category : ALL HOSPITALS ARE PUBLIC.

COLUMN HEADINGS: C=CATEGORY T=TYPE O=OPERATION SB=STAFFED BEDS

Table 2.0

Deaths, Selected Causes by Sex, Newfoundland 1979

ICD-9	Description	Males #Deaths	(Rank)	Females #Deaths	(Rank)	Total # Deaths
410	Acute Myocardial Infarction	373	(1)	214	(1)	587
414	Ischemic Ht. Dis. Other Chronic Forms	176	(2)	124	(2)	300
162	M.N. Trachea, Bronchus & Lung	113	(3)	19	(10)	132
151	M.N. Stomach	70	(4)	23	(9)	93
153	M.N. Colon	32	(6)	43	(3)	75
250	Diabetes Mellitus	19	(14)	43	(3)	62
199	M. N. Site Specified	31	(7)	25	(8)	56
428	Heart Failure	29	(8)	27	(6)	56
496	Chronic Obstruction, Airways, N.E.C.	45	(5)	11		56
434	Occlusion of Cerebral Arteries	25	(12)	28	(5)	53
440	Atherosclerosis Circulatory	26	(11)	26	(7)	52
157	M. N. Pancreas	27	(10)	13	(14)	40
174	M. N. Female Breast	0		39	(4)	39
427	Cardiac Dysrhythmias	19	(14)	18	(11)	37
485	Bronchopneumonia Organism Unspecified	24	(13)	11		35
154	M. N. Rectum	18	(15)	13	(14)	31
E819	Motor Vehicle Traffic Accident (Unspec.)	27	(10)	3		30
486	Pneumonia, Organism Unspecified	19	(14)	10		29
185	M. N. Prostrate	28	(9)	0		28
E816	Non Collision Due to Loss of Control	16		10		26
441	Acute Aneurysm	18	(15)	6		24
E814	Collision with Pedestrian	19	(14)	5		24
431	Intracerebral Haemmorrhage	16		6		22
571	Chronic Liver Disease & Cirrhosis	12		10		22
E910	Accidental Drowning and Submersion	19	(14)	3		22
191	M. N. Brain	14		6		20
402	Hypertensive Disease	9		11		20
E888	Accidental Falls Other & Unspecified	8		12		20
150	M. N. Oesophagus	14		6		20
189	M. N. Kidney & Other Urinary Organs, Nos.	10		9		19
415	Acute Pulmonary Heart Disease	6		13	(14)	19
430	Subarachnoid Haemorrhage	10		8		18
183	M. N. Ovary & Other Uterine Adnexia	0		17	(12)	17
429	Ill-Defined Heart Disease	10		6		16
437	Other Cerebrovascular Disease	4		12	(15)	16
180	M. N. Cervix Uteri	0		15	(13)	15
586	Renal Failure, Unspecified	12		3		15
769	Respiratory Distress	7		8		15
799	Other Ill Defined & Unknown Causes	7		8		15
188	M. N. Bladder	10		4		14
E812	Collision with Another Vehicle	11		3		14
E955	Firearms and Explosives, Suicide, and Self Inflicted	13		0		13
765	Short Gestation & Low Birthweight Nos.	9		4		13
	SUBTOTAL	1355		875		2230
	All Causes	1879		1257		3136
Listing as % of All Causes		72.1		69.6		71.1

NOTES: M. N. = Malignant Neoplasm; N.O.S. = Not otherwise specified; N.E.C. = Not Elsewhere Classified.

Table 3.0

Costs to the Province (Nfld.) of Various Health Care Services for the Fiscal Year Ended March 31, 1979, 80, and 81.

		FEDERAL-PROVINCIAL HOSPITAL INSURANCE PROGRAM						
	Year	IN-PATIENT	OUT-PATIENT	EQUIPMENT	TOTAL	PLAN	SERVICES	TOTAL
Board Operated Hospitals	1981	$158,917,524	$18,102,864	$2,500,000	$179,520,388	$35,000	$23,083,529	$202,638,917
	1980	144,665,868	16,183,828	2,700,000	163,649,686	24,486	25,492,476	189,066,648
	1979	126,176,973	14,689,786	1,799,000	142,665,759	91,385	20,385,582	163,142,726
Provincial Operated Hospitals	1981	12,081,657	2,503,217	161,428	14,746,302		1,766,562	16,512,864
	1980	10,884,376	1,963,307	148,579	12,996,262		1,337,045	14,333,307
	1979	9,567,067	1,983,757	212,930	11,763,754		1,317,045	13,080,799
Services provided outside of the Province to Insured Residents:								
Other Provinces	1981	2,923,944	159,400		3,083,344			3,083,344
	1980	2,919,858	165,678		3,085,536			3,085,536
	1979	2,281,079	92,892		2,373,971			2,373,971
Outside of Canada	1981	308,255	34,338		342,593			342,593
	1980	175,922	27,872		203,794			203,794
	1979	213,895	20,924		234,819			234,819
Services provided by others:								
Canadian Red Cross Society	1981	1,781,247			1,781,247			1,781,247
	1980	1,408,376			1,408,376			1,408,376
	1979	940,942			940,942			940,942
Other	1981	90,653			90,653			90,653
	1980	43,685			43,685			43,685
	1979	14,691			14,691			14,691
TOTALS	1981	$176,103,280	$20,799,819	$2,661,428	$199,564,527	$35,000	$24,850,091	$224,449,618
	1980	$160,098,085	$18,340,685	$2,848,579	$181,387,339	$24,486	$26,829,521	$208,141,346
	1979	$139,194,647	$16,787,359	$2,011,930	$157,993,936	$91,385	$21,702,627	$179,787,948

Table 3.2

Hospital Utilization Data, Non-Government Operated Hospitals,

Funded Through Hospital Services Division,

Newfoundland, 1980-81

					General Acute (Bed Size)						
	N.S.*	N.H.	Ped.	Rehab.	1-24	25-49	50-99	100-199	200-399	400+**	Total
Staffed Beds	67	49	221	42	60	214	209	409	1,124	498	2,893
Accredited Beds %	100*	100	100	100	300	85.1	100	100	100	100	97.1
Patient Days	3,382	17,773	58,759	7,320	6,346	40,129	47,031	97,588	334,223	148,500	761,051
Occupancy %	13.8	99.4	72.8	47.7	29.0	57.3	61.7	65.4	82.0	81.7	72.07
Separations	1,022	125	6,400	288	1,605	5,578	6,986	12,974	37,489	8,705	81,172
Days Stay	3,380	18,666	57,320	7,880	6,018	38,694	46,834	98,280	334,055	141,439	752,566
Length of Stay	3.3	149.3	9.0	27.4	3.7	6.9	6.7	7.6	8.9	16.2	9.3
Total Operating Costs $	2,481,507	1,878,577	16,471,575	2,232,117	2,628,017	10,130,515	11,861,997	23,212,018	73,155,850	47,944,969	191,997,142
Op. Costs/Pat. Day $	733.74	105.70	280.32	304.93	414.12	252.40	252.22	237.86	218.88	322.86	255.12
Percent TOC:											
Sal.	66.1	80.2	65.1	71.9	76.7	55.5	65.1	65.1	65.1	59.6	64.2
Supply	18.7	13.2	24.0	21.8	14.4	24.9	26.1	24.5	24.0	27.3	24.6
Benefits	4.3	5.3	4.9	5.5	5.3	5.1	5.0	5.0	4.9	4.6	4.8
Med/Surgical	1.5	.6	3.9	.7	1.2	2.6	2.2	2.8	3.9	6.4	4.2
Drugs	9.4	.6	2.1	.1	2.4‡	1.8	1.6	2.6	2.1	2.0	2.3
HOSP N=	9	2	1	1	4	6	3	3	4	1	34

Abbreviations: N.S. = Nursing Station; N.H. = Nursing Home; Ped = Pediatric; Rehab = Rehabilitation.

* High outpatient work volumes. Patients are not held long - transferred to IGA regional hospital. Certain number of beds must be kept open even if unused. Cost per patient day is an inappropriate measure. Note that IGA Regional hospital controls all beds and is accredited.

** Teaching Hospital with a designated 180 beds for chronic/extended care. Some days for chronic care beds.

‡ Net Drug Sales $51,731 net Drugs Exp. (10,926)

Note: Newborn patient days and Waterford Hospital data excluded from table.

Table 6.0

Population of Newfoundland by Age and Sex 1980 and 1981 (pop. in 000's)

	1980			1981		
Age Intervals	M	F	T	M	F	T
0 - 4	27.6	26.3	53.8	27.5	26.3	53.8
5 - 9	29.5	27.8	57.4	28.6	27.0	55.6
10 - 14	31.6	30.4	62.1	30.0	29.6	60.5
15 - 19	33.6	32.1	65.7	33.4	31.8	65.2
20 - 24	28.4	27.2	55.6	29.5	28.1	57.6
25 - 29	23.7	23.5	47.2	24.0	24.0	48.0
30 - 34	21.5	21.0	42.5	22.1	21.5	43.6
35 - 39	15.7	15.0	30.7	16.9	16.5	33.4
40 - 44	12.8	12.2	24.9	13.0	12.4	25.5
45 - 49	11.9	11.0	22.9	11.9	11.1	23.0
50 - 54	11.0	10.7	21.7	10.9	10.6	21.5
55 - 59	10.1	9.7	19.7	10.2	9.9	20.2
60 - 64	9.2	8.9	18.2	9.3	9.2	18.5
65 - 69	7.7	7.9	15.5	7.7	7.9	15.5
70 - 74	5.0	5.3	10.4	5.4	5.8	11.2
75 - 79	3.1	3.9	7.0	3.1	3.8	6.9
80 - 84	1.6	2.5	4.0	1.7	2.6	4.4
85 - 89	.8	1.2	2.0	.8	1.3	2.0
90 +	.3	.6	.9	.3	.6	.9
TOTAL	285.1	277.2	563.1	287.2	280.0	567.3

Source: Statistics Canada, Projection 4.

Table 6.1

Newfoundland Population Projections (pop. in 000's).

Age Intervals	1976	1981	1986	1991	2001
0 - 4	57.8	53.8	55.2	54.9	48.8
5 - 9	62.9	55.6	52.3	53.9	58.9
10 - 14	67.0	60.5	53.8	51.1	52.4
15 - 19	62.7	65.2	58.7	52.4	51.4
20 - 24	52.2	57.6	59.5	53.2	46.2
25 - 29	46.4	48.0	55.5	56.8	45.9
30 - 34	35.7	43.6	47.7	54.9	49.2
35 - 39	27.3	33.4	42.8	47.0	54.5
40 - 44	24.7	25.5	32.7	42.0	52.9
45 - 49	23.3	23.0	24.9	32.0	45.1
50 - 54	22.1	21.5	22.4	24.2	39.7
55 - 59	20.8	20.2	20.6	21.3	29.7
60 - 64	18.2	18.5	18.9	19.3	21.7
65 - 69	13.8	15.5	16.7	17.2	18.3
70 - 74	9.3	11.2	13.4	14.6	15.3
75 - 79	6.7	6.9	8.9	10.8	12.1
80 - 84	4.0	4.4	4.9	6.3	8.2
85 - 89	1.8	2.0	2.4	2.7	4.2
90 +	.9	.9	1.0	1.2	1.8
TOTAL	557.6	567.3	592.3	615.8	648.3

Source: Statistics Canada, Projection 4.

Note: Ages 0-19 were not scaled down. All other ages were scaled down by 4.8%. The total population was therefore scaled down by 2.6%, which is the error between the projection number and the Census working figures for 1981.

Table 6.2

Staffed Beds by Type, and Hospital, Nfld.,

March 31, 1981.

	N.S.	N.H.	Ped.	Rehab.	Ment.	C.H.	IGA <50	IGA Reg	Bd. Op by Bed Size <50	>50<400	>400	Total	Rate
Med	16	0	92	0	0	0	14	25	26	324	128	625	1.1
Surg.	8	0	98	0	0	0	8	50	0	412	154	730	1.3
M.S. Undist	3	0	0	0	0	238	27	0	98	143	0	509	.9
I.C.U.	0	0	18	0	0	0	0	10	0	64	16	108	.2
OBS.	12	0	0	0	0	55	10	20	28	174	0	299	.5
Ped.	17	0	0	0	0	83	27	26	42	236	0	431	.8
Psych.	0	0	13	0	70	0	0	16	0	102	20	221	.4
Other	0	0	0	0	0	0	4@	0	0	116*	0	120	.2
Total Short	56	0	221	0	70	376	90	147	194	1571	318	3028	5.3
Rehab.	0	0	0	0	0	0	0	0	0	0	44	44	.1
Ext. Care	0	49	0	42	0	0	0	0	0	15	130	236	.4
Other	0	0	0	0	330	0	0	0	0	9+	6	345	.6
Total Long	0	49	0	42	330	0	0	0	0	24	180	625	1.1
Grand Total	56	49	221	42	400	376	90	147	194	1595	498	3668	6.4

NOTES:

1. Rate = Staffed Beds per 1000 population
2. Nfld. Population 1981 Preliminary Count 569,615 adjusted for 1% undercount.
3. @ 4TB Beds; * 116 Gyn Beds. + 9 Palliative Care.
4. N.S. = Nursing Station; N.H. = Nursing Home; Ped. = Pediatrics; Rehab. = Rehabilitation; Ment. = Mental Health; C.H. = Cottage Hospital (includes one other government operated hospital).

Table 6.3

Separations by Hospital and Residence of Patient Ending March 3, 1981, Newfoundland

Treatment	Residence: Eastern	Central	Western	Northern	Out	Unknown	Total	%
Eastern	48733	2764	1149	840	378	15	53879	51.6
Central	449	21243	98	95	90	0	21975	21.1
Western	77	452	14696	397	84	1	15707	15.1
Northern	35	62	69	10394	684	0	11244	10.8
Out-of-Province	432	158	358	294	249	0	1491	1.4
Unknown	17	8	4	4	0	0	33	0.3
Total	49743	24687	16374	12024	1485	16	104329	
%	47.7	23.7	15.7	11.5	1.4	0.2		

Table 6.5

20 Leading Diagnoses of Hospitalized Patients For Each and Total Sex Canadian Diagnostic Listing

Nfld. April 1, 1980-81

C-No.	C-List Description	Separations: Male	Female	Total
141	Del. Without Mention of Complication	0	5591(1)	5591(1)
170	Symptoms, Senility and Ill-defined Conditions	1420 (1)	2312(2)	3732(2)
144	Del. With Other Complications...	0	2485(2)	2485(3)
186	Special Conditions and Exams Without Sickness	512 (11)	1910(4)	2422(4)
80	Other Ischemic Heart Disease	1191 (2)	987(11)	2178(5)
81	Other Forms of Heart Disease	1022 (3)	891(14)	1913(6)
44	Diabetes Mellitus	474 (14)	875(5)	1349(7)
143	Del. Complicated by Abnormality of Pelvis or Prolonged Labor	0	1326(6)	1326(8)
139	Other Complications of Pregnancy	0	1309(10)	1309(9)
118	Cholelithiasis	224	992(7)	1216(10)
134	Disorders of Menstruation	0	1211(8)	1211(11)
131	Diseases of Ovary, Fallopian tube and parametrium	0	1197	1197(12)
124	Calculus of Urinary Tract	703 (6)	484	1187(13)
79	Acute Myocardial Infarction	763 (5)	401	1164(14)
94	Penumonia	622 (8)	511(20)	1133(15)
103	Other Diseases of the Respiratory System	764 (4)	343	1107(16)
115	Other Diseases of Intestines and Peritoneum	505 (12)	552(17)	1057(17)
56	Neuroses	324	729(16)	1053(18)
135	Other Dis. of Female Genital Organs	0	1014(9)	1014(19)
126	Other Dis. of the Urinary System	433 (17)	550(18)	983(20)
54	Affective Psychosis	358	623(16)	976
140	Abortion	0	946(12)	946
84	Other Cerebrovascular Diseases	501 (13)	431	932
111	Hernia Without Mention of Obstruction	652 (7)	289	941
127	Hyperplasia of Prostrate	452 (16)	0	452
153	Displacement of Intervertebral Disc.	458 (15)	409	867
154	Other Dis. of Joints	401 (20)	286	687
171	Fracture of Skull and other Intracranial Injury	429 (18)	196	625
178	Laceration Open Wound..Superficial Injury..With Intact Skin	602 (9)	226	828
53	Schizophrenia	403 (19)	229	632
57	Alcoholism	577 (10)	92	669
132	Infective Diseases of Uterus, Vagina and Vulva	0	520(19)	520
137	Hemorrhage of Pregnancy	0	759(15)	759
		13785	30676	44461
	Total Diagnoses for Each Sex	38002	55160	93162
	Top Listing as %	26.3	55.6	47.7

Table 12.2

ROUTINE IMMUNIZATION SCHEDULE
FOR INFANTS AND CHILDREN

1st. visit	Age 2 months	Diphtheria	Pertussis	Tetanus	Polio
2nd. visit	Age 4 months	Diphtheria	Pertussis	Tetanus	Polio
3rd. visit	Age 6 months	Diphtheria	Pertussis	Tetanus	Polio
4th. visit	Age 12 months	Measles	Mumps	Rubella	
5th. visit	Age 18 months	Diphtheria	Pertussis	Tetanus	Polio
6th. visit	Age Kg.	Diphtheria	Pertussis	Tetanus	Polio
7th. visit	Grade 9	Diphtheria		Tetanus	Polio

Table 13.1

Tuberculosis Cases Notified, Nfld., 1978 - 1980
By Sex and Form of T.B. and By Age and Active Type.

	Sex		Form of Tuberculosis									
Year	M.	F.	Pul.	Mil.	Naso-Pharang.	Pleu.	Prim.	G.U.	Bone & Joint	TBM.	Other	Total
1978	59	56	54	3	-	4	21	16	9	3	5	115
1979	35	40	39	1	1	2	4	18	3	2	5	75
1980	51	38	51	1	-	5	10	10	3	2	6	89

		AGE STRUCTURE									
	Active Type	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80+	Total
1978	Reactivated	0	2	0	3	2	8	2	2	0	19
1979	Reactivated	1	0	1	1	0	0	2	2	0	7
1980	Reactivated	-	-	-	1	1	2	-	-	-	4
1978	New	16	13	11	8	15	10	11	8	4	96
1979	New	2	7	3	8	10	14	9	9	6	68
1980	New	10	14	8	9	13	14	11	5	1	85
1978	Total	16	15	11	11	17	18	13	10	4	115
1979	Total	3	7	4	9	10	14	11	11	6	75
1980	Total	10	14	8	10	14	16	11	5	1	89

Table 13.2

Nfld. Residents Receiving Anti-tuberculosis Drugs, in Treatment of Tuberculosis or Chemoprophylaxix, 1975-1980

	Drugs in Treatment of Tuberculosis						Chemoprophylaxis	
	Inpatient on Treatment		Outpatients on Treatment		Total Patients on Treatment		Residents	
Inventory Date	Rate	No.	Rate	No.	Rate	No.	Rate	No.
Dec. 31, 1975	1.5	8	49.5	272	50.9	280	31.5	173
Dec. 31, 1976	1.1	6	38.1	209	39.2	215	38.8	213
Dec. 31, 1977	0.7	4	28.3	159	29.0	163	40.4	227
Dec. 31, 1978	1.4	8	29.1	167	30.5	175	39.1	224
Dec. 31, 1979	0.9	5	22.3	129	23.2	134	47.8	276
Dec. 31, 1980	0.7	4	15.1	88	15.8	92	39.6	230

Rate per 100,000 population.

Table 15.0

Public Health Nursing Statistics: Maternal and Child Care; School Health; Communicable Disease Control; Home Care; Nfld., 1978 and 1981.

A. Maternal and Child Care	1978-79	1979-80	1980-81
Pre-natals for home visits	409	420	987
Pre-natal home visits	880	1,044	1795
Pre-natal classes held	518	523	736
Attendance at pre-natal classes	3,734	3,049	3,120
Post-natal patients	5,930	8,349	8,968
Post-natal home visits	11,483	19,311	21,177
Child Health Clinics Held	3,272	3,000*	3,500
Attended Child Health Clinics	36,392	28,234*	35,630

* Estimated figures.

B. School Health			
Hours spent in schools	29,522	32,292	32,843
Children physically examined	6,071	4,029	7,594
Defects	3,421	2,528	2,945
Recorded Corrections	1,208	1,414	1,280
Audiometer testing	14,194	13,225	17,027
Hearing Defects	1,026	827	1,169
Recorded Corrections	298	610	650
Vision Screening	52,177	54,138	57,697
Vision Defects	7,863	7,448	7,319
Recorded Corrections	2,539	3,104	2,932
Rapid Classroom Inspections	51,250	45,115	45,413
Communicable Diseases	3,605	4,204	3,368
Communicable Diseases Requiring Emergency Treatment	4,238	5,296	5,333
Students for Individual Counselling	6,220	4,893	5,178
Follow-up home visits	1,949	1,816	1,497
Follow-up phone calls	9,240	10,680	10,468

C. Communicable Disease Control			
Patients with communicable diseases (excl T.B.)	974	868	841
Communicable disease home-visits (excl. T.B.)	1,444	1,114	988
Tuberculosis patients	526	411	348
Tuberculosis home visits	716	232	402
Tuberculosis contacts	2,004	1,556	2,195
Tuberculosis contact home visits	2,493	1,514	2,469

Immunization - doses: schools & child health clinics.

D. Home Care			
Ped. Patients	2,872	2,581	2,826
Visits	9,472	8,340	8,297
Adult Patients	8,583	5,300	5,679
Visits	57,101	26,995	29,090
Geriatric Patients	*	3,147	4,119
Visits	*	32,114	29,791
Psychiatric			
Ped. Patients	369	416	358
Adult Patients	40	43	49
Ped. Visits	2,697	2,376	2,152
Adult Visits	283	261	838
Supportive Care			
Patients	-	522	635
Visits	-	2,473	3,374

* Figures included in preceding Adult Patients and Visits classification.

POOR

QUALITY

ORIGINAL